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ICIPEG 2014 Mariyamni Awang 2015-03-20 This book presents the proceedings of the 3rd International Conference on Integrated Petroleum Engineering and Geosciences 2014 (ICIPEG2014). Topics covered on the petroleum engineering side include reservoir modeling and simulation, enhanced oil recovery, unconventional oil and gas reservoirs, production and operation. Similarly geoscience presentations cover diverse areas in geology, geophysics palaeontology and geochemistry. The selected papers focus on current interests in petroleum engineering and geoscience. This book will be a bridge between engineers, geoscientists, academicians and industry.

The Practice of Reservoir Engineering (Revised Edition) L.P. Dake 2001-05-10 This revised edition of the bestselling Practice of Reservoir Engineering has been written for those in the oil industry requiring a working knowledge of how the complex subject of hydrocarbon reservoir engineering can be applied in the field in a practical manner. Containing additions and corrections to the first edition, the book is a simple statement of how to do the job and is particularly suitable for reservoir/production engineers as well as those associated with hydrocarbon recovery. This practical book approaches the basic limitations of reservoir engineering with the basic tenet of science: Occam's Razor, which applies to reservoir engineering to a greater extent than for most physical sciences - if there are two ways to account for a physical phenomenon, it is the simpler that is the more useful. Therefore, simplicity is the theme of this volume. Reservoir and production engineers, geoscientists, petrophysicists, and those involved in the management of oil and gas fields will want this edition.

Well Performance Michael Golan 1987-08-31

Well Test Design & Analysis George Stewart 2011 Petroleum engineers face the daily challenges of designing and testing wells. Finding the right technical data guide for conducting these tasks can be daunting, and so renowned petroleum engineer George Stewart has written the comprehensive volume Well Test Design & Analysis, filled with advanced information unparalleled on a variety of wellbore topics. From ascertaining accurate reservoir descriptions, to the intricacies of designing a horizontal well program, the author covers every topic in detail. The volume includes a CD containing chapters 16 - 20.

Drilling Engineering Heriot-Watt Professors 2017-08-25 Drilling Engineering Book

Physics and Mechanics of Primary Well Cementing Alexandre Lavrov 2016-08-25 This book covers the major physical and mechanical processes that unfold during cementing and subsequent well service, and which can affect the well integrity. Focusing on the underlying physics, it concisely presents the central concepts of well cementing. The authors discuss the displacement of different fluids in the annulus, the mechanical stability of cement subject to varying downhole temperature, pressure and in-situ stresses, and the impact of defects on cement integrity under different mechanical and thermal loads over the course of the well's lifetime. The book identifies knowledge gaps and unresolved issues, and proposes new directions for future research and development. The book is a valuable resource for practising engineers in the oil and gas industry, academic and industrial researchers involved in oil and gas engineering, and to graduate students within this same sector.

Carbonate Reservoir Heterogeneity Vahid Tavakoli 2019-11-11 This book provides a comprehensive overview of the parameters and factors that cause heterogeneity in carbonate reservoirs, and examines how they interact with one another. It explores the various scales of heterogeneity, how they are caused, and

how they can be minimized, as well as how the scales affect each other, providing practical examples in each chapter. The book concludes by discussing the effect of heterogeneity on petrophysical evaluations. As reducing heterogeneity is the only way to obtain accurate carbonate reservoir characteristics at the regional scale, the book offers an important reference guide for all geologists, engineers, and modelers working with subsurface data.

Fundamentals of Drilling Engineering M. E. Hossain 2016-11-11 The book clearly explains the concepts of the drilling engineering and presents the existing knowledge ranging from the history of drilling technology to well completion. This textbook takes on the difficult issue of sustainability in drilling engineering and tries to present the engineering terminologies in a clear manner so that the new hire, as well as the veteran driller, will be able to understand the drilling concepts with minimum effort.

Petroleum Production Engineering Boyun Guo, 2017-02-10 Petroleum Production Engineering, Second Edition, updates both the new and veteran engineer on how to employ day-to-day production fundamentals to solve real-world challenges with modern technology. Enhanced to include equations and references with today's more complex systems, such as working with horizontal wells, workovers, and an entire new section of chapters dedicated to flow assurance, this go-to reference remains the most all-inclusive source for answering all upstream and midstream production issues. Completely updated with five sections covering the entire production spectrum, including well productivity, equipment and facilities, well stimulation and workover, artificial lift methods, and flow assurance, this updated edition continues to deliver the most practical applied production techniques, answers, and methods for today's production engineer and manager. In addition, updated Excel spreadsheets that cover the most critical production equations from the book are included for download. Updated to cover today's critical production challenges, such as flow assurance, horizontal and multi-lateral wells, and workovers Guides users from theory to practical application with the help of over 50 online Excel spreadsheets that contain basic production equations, such as gas lift potential, multilateral gas well deliverability, and production forecasting Delivers an all-inclusive product with real-world answers for training or quick look up solutions for the entire petroleum production spectrum

Drilling Engineering Handbook E.H. Austin 2012-12-06 This book presents the fundamental principles of drilling engineering, with the primary objective of making a good well using data that can be properly evaluated through geology, reservoir engineering, and management. It is written to assist the geologist, drilling engineer, reservoir engineer, and manager in performing their assignments. The topics are introduced at a level that should give a good basic understanding of the subject and encourage further investigation of specialized interests. Many organizations have separate departments, each performing certain functions that can be done by several methods. The reentering of old areas, as the industry is doing today, particularly emphasizes the necessity of good holes, logs, casing design, and cement job. Proper planning and coordination can eliminate many mistakes, and I hope the topics discussed in this book will play a small part in the drilling of better wells. This book was developed using notes, comments, and ideas from a course I teach called "Drilling Engineering with Offshore Considerations." Some "rules of thumb" equations are used throughout, which have proven to be helpful when applied in the field. Preface proper perspective. The topics are presented in the proper order for carrying through the drilling of a well. *Input of Contaminants to the North Sea from the United Kingdom* Heriot-Watt University. Institute of Offshore Engineering 1984

Theory of Linear Poroelasticity with Applications to Geomechanics and Hydrogeology Herbert F. Wang 2017-02-15 The theory of linear poroelasticity describes the interaction between mechanical effects and adding or removing fluid from rock. It is critical to the study of such geological phenomena as earthquakes and landslides and is important for numerous engineering projects, including dams, groundwater withdrawal, and petroleum extraction. Now an advanced text synthesizes in one place, with one notation, numerous classical solutions and applications of this highly useful theory. The introductory chapter recounts parallel developments in geomechanics, hydrogeology, and reservoir engineering that are unified by the tenets of poroelasticity. Next, the theory's constitutive and governing equations and their associated material parameters are described. These equations are then specialized for different simplifying geometries: unbounded problem domains, uniaxial strain, plane strain, radial symmetry, and axisymmetry. Example problems from geomechanics, hydrogeology, and petroleum engineering are incorporated throughout to illustrate poroelastic behavior and solution methods for a wide variety of real-world scenarios. The final chapter provides outlines for finite-element and boundary-element formulations of the field's governing equations. Whether read as a course of study or consulted as a reference by researchers and professionals, this volume's user-friendly presentation makes accessible one of geophysicists' most important subjects and will do much to reduce poroelasticity's reputation as difficult to master.

Integrated Sand Management For Effective Hydrocarbon Flow Assurance 2015-06-15 This Handbook provides solutions to the fundamental issues associated with wells and reservoirs experiencing sanding problems, especially in deepwater environments. Sand Management is a massive challenge for the petroleum industry as it extends its exploration activities to new frontiers. Challenging ultra deepwater, High Pressure-High Temperature (HP-HT) and Arctic environments require engineers to drill more complex wells and manage more complex reservoirs, the majority of which are prone to massive sand production. Covering such fundamentals as how to maximize individual wells and field development performance, as well as how to minimize operational cost, non-productive time and guarantee flow assurance across the entire composite production system from reservoirs through the wellbore to the topside and flow lines, this handbook explains that the biggest challenge facing operators is the shortage of sand management personnel and helps companies realize the value of their assets. Reference for knowledge transfer and skills development in sand management for effective flow assurance Emphasis on HP-HT and deepwater environments Meets the needs of new and practising engineers alike as well as non-technical personnel supporting the offshore industry
DRILLING ENGINEERING M. Rafiqul Islam 2020-09-13 Sustainable Oil and Gas Development Series: Drilling Engineering delivers research materials and emerging technologies that conform sustainability drilling criteria. Starting with ideal zero-waste solutions in drilling and long-term advantages, the reference discusses the sustainability approach through the use of non-linear solutions and works its way through the most conventional practices and procedures used today. Step-by-step formulations and examples are provided to demonstrate how to look at conventional practices versus sustainable approaches with eventually diverging towards a more sustainable alternative. Emerging technologies are covered and detailed sustainability analysis is included. Economic considerations, analysis, and long-term consequences, focusing on risk management round out the with conclusions and a extensive glossary. Sustainable Oil and Gas Development Series: Drilling Engineering gives today's petroleum and drilling engineers a guide how to analyze and evaluate their operations in a more environmentally-driven way. Proposes sustainable technical criteria and strategies for today's most common drilling practices such as horizontal drilling, managed pressure drilling, and unconventional shale activity Discusses economic benefits and development challenges to invest in environmentally-friendly operations Highlights the most recent research, analysis, and challenges that remain including global optimization

Drilling Engineering 2014

Directional Drilling Tom Inglis 2013-11-11 Some 35 years ago I was somewhat precariously balanced in a drilling derrick aligning a whipstock into a directional hole in North Holland by the Stokenbury method, and no doubt thinking to myself that I was at the very forefront of technology. During the intervening period it has become obvious to many of us that some of the most significant technical advances in the oil business have been made in drilling, and particularly in the fields of offshore and directional drilling. It has also become apparent that the quality of the technical literature describing these advances has not kept pace

with that of the advances themselves in many instances. A particular glaring example of this has been in the field of directional drilling where a large literature gap has existed for many years. I am delighted to see this gap now filled with the present volume by my friend Tom Inglis. Indeed it is only after reading his comprehensive book that I realise the extent of my own ignorance of the latest techniques of directional drilling and how desirable it was to have an authoritative text on the subject. I feel sure that this volume will be welcomed by the industry and warmly recommend it to all who are in any way involved and interested in the fascinating world of drilling.

Impact of Human Activity on the Geological Environment EUROCK 2005 Pavel Konecny 2005-05-12 This work focuses on the impact of human activity on the geological environment and contains over 100 papers dealing with laboratory and field research investigations in geomechanics, geoengineering and mathematical modelling. Topics covered are grouped into eight main themes: response of the rock mass to human impact; slope stability; field research; laboratory research; stability of underground openings; mathematical modelling; stress measurements, and mineral and rock disintegration.

Intelligent Digital Oil and Gas Fields Gustavo Carvajal 2017-12-14 Intelligent Digital Oil and Gas Fields: Concepts, Collaboration, and Right-time Decisions delivers to the reader a roadmap through the fast-paced changes in the digital oil field landscape of technology in the form of new sensors, well mechanics such as downhole valves, data analytics and models for dealing with a barrage of data, and changes in the way professionals collaborate on decisions. The book introduces the new age of digital oil and gas technology and process components and provides a backdrop to the value and experience industry has achieved from these in the last few years. The book then takes the reader on a journey first at a well level through instrumentation and measurement for real-time data acquisition, and then provides practical information on analytics on the real-time data. Artificial intelligence techniques provide insights from the data. The road then travels to the "integrated asset" by detailing how companies utilize Integrated Asset Models to manage assets (reservoirs) within DOF context. From model to practice, new ways to operate smart wells enable optimizing the asset. Intelligent Digital Oil and Gas Fields is packed with examples and lessons learned from various case studies and provides extensive references for further reading and a final chapter on the "next generation digital oil field," e.g., cloud computing, big data analytics and advances in nanotechnology. This book is a reference that can help managers, engineers, operations, and IT experts understand specifics on how to filter data to create useful information, address analytics, and link workflows across the production value chain enabling teams to make better decisions with a higher degree of certainty and reduced risk. Covers multiple examples and lessons learned from a variety of reservoirs from around the world and production situations Includes techniques on change management and collaboration Delivers real and readily applicable knowledge on technical equipment, workflows and data challenges such as acquisition and quality control that make up the digital oil and gas field solutions of today Describes collaborative systems and ways of working and how companies are transitioning work force to use the technology and making more optimal decisions

National Offshore Information Conference Papers Heriot-Watt University. Institute of Offshore Engineering 1983

Equations of State and PVT Analysis Tarek Ahmed 2016-03-02 Understanding the properties of a reservoir's fluids and creating a successful model based on lab data and calculation are required for every reservoir engineer in oil and gas today, and with reservoirs becoming more complex, engineers and managers are back to reinforcing the fundamentals. PVT (pressure-volume-temperature) reports are one way to achieve better parameters, and Equations of State and PVT Analysis, 2nd Edition, helps engineers to fine tune their reservoir problem-solving skills and achieve better modeling and maximum asset development. Designed for training sessions for new and existing engineers, Equations of State and PVT Analysis, 2nd Edition, will prepare reservoir engineers for complex hydrocarbon and natural gas systems with more sophisticated EOS models, correlations and examples from the hottest locations around the world such as the Gulf of Mexico, North Sea and China, and Q&A at the end of each chapter. Resources are maximized with this must-have reference. Improve with new material on practical applications, lab analysis, and real-world sampling from wells to gain better understanding of PVT properties for crude and natural gas Sharpen your reservoir models with added content on how to tune EOS parameters accurately Solve more unconventional

problems with field examples on phase behavior characteristics of shale and heavy oil

Naturally Fractured Reservoirs Roberto Aguilera 1980 This book deals exclusively with naturally fractured reservoirs and includes many subjects usually treated in separate volumes. A highly practical edition, Naturally Fractured Reservoirs is written for students, reservoir geologists, log analysts and petroleum engineers.

SPE Drilling & Completion 2005

Polymer-Improved Oil Recovery K.S. Sorbie 2013-11-21 The importance of oil in the world economy cannot be overstated, and methods for recovering oil will be the subject of much scientific and engineering research for many years to come. Even after the application of primary depletion and secondary recovery processes (usually waterflooding), much oil usually remains in a reservoir, and indeed in some heterogeneous reservoir systems as much as 70% of the original oil may remain. Thus, there is an enormous incentive for the development of improved or enhanced methods of oil recovery, aimed at recovering some portion of this remaining oil. The techniques used range from 'improved' secondary flooding methods (including polymer and certain gas injection processes) through to 'enhanced' or 'tertiary' methods such as chemical (surfactant, caustic, foam), gas miscible (carbon dioxide, gas reinjection) and thermal (steam soak and drive, in-situ combustion). The distinction between the classification of the methods usually refers to the target oil that the process seeks to recover. That is, in 'improved' recovery we are usually aiming to increase the oil sweep efficiency, whereas in 'tertiary' recovery we aim to mobilise and recover residual or capillary trapped oil. There are a few books and collections of articles which give general overviews of improved and enhanced oil recovery methods. However, for each recovery method, there is such a wide range of interconnected issues concerning the chemistry, physics and fluid mechanics of flow in porous media, that rarely are these adequately reviewed.

Proceedings of the International Field Exploration and Development Conference 2019 Jia'en Lin 2020-07-11 This book gathers selected papers from the 8th International Field Exploration and Development Conference (IFEDC 2019) and addresses a broad range of topics, including: Low Permeability Reservoir, Unconventional Tight & Shale Oil Reservoir, Unconventional Heavy Oil and Coal Bed Gas, Digital and Intelligent Oilfield, Reservoir Dynamic Analysis, Oil and Gas Reservoir Surveillance and Management, Oil and Gas Reservoir Evaluation and Modeling, Drilling and Production Operation, Enhancement of Recovery, Oil and Gas Reservoir Exploration. The conference not only provided a platform to exchange experiences, but also promoted the advancement of scientific research in oil & gas exploration and production. The book is chiefly intended for industry experts, professors, researchers, senior engineers, and enterprise managers.

Petroleum Reservoir Rock and Fluid Properties, Second Edition Abhijit Y. Dandekar 2013-02-21 A strong foundation in reservoir rock and fluid properties is the backbone of almost all the activities in the petroleum industry. Suitable for undergraduate students in petroleum engineering, Petroleum Reservoir Rock and Fluid Properties, Second Edition offers a well-balanced, in-depth treatment of the fundamental concepts and practical aspects that encompass this vast discipline. New to the Second Edition Introductions to Stone II three-phase relative permeability model and unconventional oil and gas resources Discussions on low salinity water injection, saturated reservoirs and production trends of five reservoir fluids, impact of mud filtrate invasion and heavy organics on samples, and flow assurance problems due to solid components of petroleum Better plots for determining oil and water Corey exponents from relative permeability data Inclusion of Rachford-Rice flash function, Plateau equation, and skin effect Improved introduction to reservoir rock and fluid properties Practice problems covering porosity, combined matrix-channel and matrix-fracture permeability, radial flow equations, drilling muds on fluid saturation, wettability concepts, three-phase oil relative permeability, petroleum reservoir fluids, various phase behavior concepts, phase behavior of five reservoir fluids, and recombined fluid composition Detailed solved examples on absolute permeability, live reservoir fluid composition, true boiling point extended plus fractions properties, viscosity based on compositional data, and gas-liquid surface tension Accessible to anyone with an engineering background, the text reveals the importance of understanding rock and fluid properties in petroleum engineering. Key literature references, mathematical expressions, and laboratory measurement techniques illustrate the correlations and influence between the various properties. Explaining how to acquire accurate and reliable data, the author describes coring and fluid sampling methods, issues related to handling samples for core

analyses, and PVT studies. He also highlights core and phase behavior analysis using laboratory tests and calculations to elucidate a wide range of properties.

Proceedings of the International Field Exploration and Development Conference 2020 Jia'en Lin 2021-06-17 This book is a compilation of selected papers from the 10th International Field Exploration and Development Conference (IFEDC 2020). The proceedings focuses on Reservoir Surveillance and Management, Reservoir Evaluation and Dynamic Description, Reservoir Production Stimulation and EOR, Ultra-Tight Reservoir, Unconventional Oil and Gas Resources Technology, Oil and Gas Well Production Testing, Geomechanics. The conference not only provides a platform to exchanges experience, but also promotes the development of scientific research in oil & gas exploration and production. The main audience for the work includes reservoir engineer, geological engineer, enterprise managers senior engineers as well as professional students.

Well Completion Design Jonathan Bellarby 2009-04-13 Completions are the conduit between hydrocarbon reservoirs and surface facilities. They are a fundamental part of any hydrocarbon field development project. They have to be designed for safely maximising the hydrocarbon recovery from the well and may have to last for many years under ever changing conditions. Issues include: connection with the reservoir rock, avoiding sand production, selecting the correct interval, pumps and other forms of artificial lift, safety and integrity, equipment selection and installation and future well interventions. * Course book based on course well completion design by TRACS International * Unique in its field: Coverage of offshore, subsea, and landbased completions in all of the major hydrocarbon basins of the world. * Full colour

Rig Hydraulics Hussain Rabia 1989

E-Training Practices for Professional Organizations Paul Nicholson 2010-04-08 "E-Training Practices for Professional Organizations" is an essential reference for anyone interested in the integration of e-business, e-work and e-learning processes. The book collects, for the first time, the proceedings from the 2003 IFIP eTrain Conference held in Pori, Finland. The text serves as a multi-disciplinary resource for information on the research, development and applications of all topics related to e-Learning. The first half of the book discusses theories, paradigms and their applications in academia and industry. The last half of the book examines learning environments, design issues and collaboration among the corporate, governmental and academic sectors. With academic and professional contributors, "E-Training Practices for Professional Organizations" reflects the multi-faceted and exciting nature of e-training studies. This volume presents the balanced view of past developments and current research necessary to truly reach the potential of this burgeoning field.

Core Analysis Colin McPhee 2015-12-10 Core Analysis: A Best Practice Guide is a practical guide to the design of core analysis programs. Written to address the need for an updated set of recommended practices covering special core analysis and geomechanics tests, the book also provides unique insights into data quality control diagnosis and data utilization in reservoir models. The book's best practices and procedures benefit petrophysicists, geoscientists, reservoir engineers, and production engineers, who will find useful information on core data in reservoir static and dynamic models. It provides a solid understanding of the core analysis procedures and methods used by commercial laboratories, the details of lab data reporting required to create quality control tests, and the diagnostic plots and protocols that can be used to identify suspect or erroneous data. Provides a practical overview of core analysis, from coring at the well site to laboratory data acquisition and interpretation Defines current best practice in core analysis preparation and test procedures, and the diagnostic tools used to quality control core data Provides essential information on design of core analysis programs and to judge the quality and reliability of core analysis data ultimately used in reservoir evaluation Of specific interest to those working in core analysis, porosity, relative permeability, and geomechanics

Hydrocarbon Exploration and Production Frank Jahn 1998-03-13 This book on hydrocarbon exploration and production is the first volume in the series Developments in Petroleum Science. The chapters are: The Field Life Cycle, Exploration, Drilling Engineering, Safety and The Environment, Reservoir Description, Volumetric Estimation, Field Appraisal, Reservoir Dynamic Behaviour, Well Dynamic Behaviour, Surface Facilities, Production Operations and Maintenance, Project and Contract Management, Petroleum Economics, Managing the Producing Field, and Decommissioning.

SPE Drilling Engineering 1992

Vanished Ocean Dorrik Stow 2012-03-29 Once, the ocean of Tethys stretched across the world. It vanished just before Man appeared on Earth. Dorrik Stow tells of the powerful forces that created and destroyed a great ocean, its marine life, its extinctions, its impact on climate, and the many clues by which scientists have put together its story, stretching back 250 million years.

Deepwater Drilling Peter Aird 2018-12-03 Deepwater Drilling: Well Planning, Design, Engineering, Operations, and Technology Application presents necessary coverage on drilling engineering and well construction through the entire lifecycle process of deepwater wells. Authored by an expert with real-world experience, this book delivers illustrations and practical examples throughout to keep engineers up-to-speed and relevant in today's offshore technology. Starting with pre-planning stages, this reference dives into the rig's elaborate rig and equipment systems, including ROVs, rig inspection and auditing procedures. Moving on, critical drilling guidelines are covered, such as production casing, data acquisition and well control. Final sections cover managed pressure drilling, top and surface hole 'riserless' drilling, and decommissioning. Containing practical guidance and test questions, this book presents a long-awaited resource for today's offshore engineers and managers. Helps readers gain practical experience from an author with over 35 years of offshore field know-how Presents offshore drilling operational best practices and tactics on well integrity for the entire lifecycle of deepwater wells Covers operations and personnel, from emergency response management, to drilling program outlines

Wireline Formation Testing & Well Deliverability George Stewart 2012 Modern reservoir engineering must accommodate for a complex set of heterogeneous phases contained in the well and petroleum reservoir. Achieving the optimal solution to reservoir problems involves employing sophisticated simulation techniques, executing complex well-completion actions and following up with constant attention to the changes within a reservoir. Renowned petroleum engineer George Stewart offers in-depth information in his latest book, Wireline Formation Testing and Well Deliverability. A companion to his recent book, Well Test Design & Analysis, this newest technical volume covers the widest range of possible issues for reservoir engineering. Stewart's exhaustive explanations include the nuances of radial flow theory, examples of when to run production logs, and to well testing for drawdown in a commingled reservoir. The volume includes a CD containing chapters 13-17.

Petroleum Reservoir Rock and Fluid Properties Abhijit Y. Dandekar 2006-02-23 A strong foundation in reservoir rock and fluid properties is the backbone of almost all the activities in the petroleum industry. Petroleum Reservoir Rock and Fluid Properties offers a reliable representation of fundamental concepts and practical aspects that encompass this vast subject area. The book provides up-to-date coverage of vari

Upstream Petroleum Fiscal and Valuation Modeling in Excel Ken Kasriel 2013-06-06 Please contact the authors at upstream.petroleum.in.excel@gmail.com for details of how to access the trial version of Crystal Ball, as well as the Excel and other files which are *not* part of the e-book version download. "This is a book no deal team should be without. It is a must for those involved in upstream oil and gas transactions, planning, budgeting, investment appraisal and portfolio management. Its step-by-step approach cuts through complexity, making it comprehensive and understandable by a wide range of users with a wide range of abilities. It can be used as a textbook, an introductory primer or as a handbook that you can dip in and out of or read cover to cover." —Michael Lynch-Bell, Senior Advisor, Oil & Gas, Ernst & Young LLP; ex-officio Chairman, UN Expert Group on Resource Classification In the upstream petroleum industry, it is the value of post-tax cashflows which matters most to companies, governments, investors, lenders, analysts, and advisors. Calculating these cashflows and understanding their "behavior," however, is challenging, as the industry's specialized fiscal systems can be complex, jargon-laden, and sometimes seem to be a "world of their own". Upstream Petroleum Fiscal and Valuation Modeling in Excel: A Worked Examples Approach demystifies fiscal analysis which, unlike disciplines such as Earth sciences and engineering, can be learned

from a book. Written in plain English for laymen and for experienced practitioners alike, it is a reader-friendly, clear, practical, step-by-step hands-on guide for both reference and self-paced study. The book does not catalogue the 100+ different petroleum fiscal regimes in use at the time of writing. Rather, drawing on the authors' combined 48 years' experience, it takes a more timeless, generic treatment, by covering the most common variants of royalties, taxation, production sharing arrangements, bonuses and abandonment funding, through a dual approach: first, showing how to model them in Excel, and then providing interactive exercises to prompt (and answer) questions that analyze impacts on cashflows. In addition to the main text, the book consists of over 120 Excel files (ranging from modular examples to full models) in Excel 2007 and 2003 formats; over 400 pages of supplementary PDF files; VBA features to enhance model functionality; and an introduction to risk modeling with exercises for the included trial version of Oracle's Crystal Ball software. It offers both a wealth of content and models equal to or surpassing what is available from fiscal modeling courses costing several times more; and greater insights into underlying calculations than commercially available "black box" fiscal software. New US Securities and Exchange Commission (SEC) rules planned for 2013 will force petroleum companies to disclose more fiscal information on an individual country basis. This will make it more important than ever for analysts to understand how to model oil and gas terms and the potential impacts of the disclosed government payments on future oil and gas company profitability. Due to the heavy use of graphics and cross references used in this particular text, some readers might find that the printed book offers a more optimal reading experience than certain e-formats particularly with the Kindle eMobi format.

Standard Handbook of Petroleum and Natural Gas Engineering: William C. Lyons 1996-10-16 Petroleum engineering now has its own true classic handbook that reflects the profession's status as a mature major engineering discipline. Formerly titled the Practical Petroleum Engineer's Handbook, by Joseph Zaba and W.T. Doherty (editors), this new, completely updated two-volume set is expanded and revised to give petroleum engineers a comprehensive source of industry standards and engineering practices. It is packed with the key, practical information and data that petroleum engineers rely upon daily. The result of a fifteen-year effort, this handbook covers the gamut of oil and gas engineering topics to provide a reliable source of engineering and reference information for analyzing and solving problems. It also reflects the growing role of natural gas in industrial development by integrating natural gas topics throughout both volumes. More than a dozen leading industry experts-academia and industry-contributed to this two-volume set to provide the best, most comprehensive source of petroleum engineering information available.

Practical Petroleum Reservoir Engineering Methods H. C. Slider 1976

Fluid Flow Measurement Paul J. LaNasa 2014-04-12 There is a tendency to make flow measurement a highly theoretical and technical subject but what most influences quality measurement is the practical application of meters, metering principles, and metering equipment and the use of quality equipment that can continue to function through the years with proper maintenance have the most influence in obtaining quality measurement. This guide provides a review of basic laws and principles, an overview of physical characteristics and behavior of gases and liquids, and a look at the dynamics of flow. The authors examine applications of specific meters, readout and related devices, and proving systems. Practical guidelines for the meter in use, condition of the fluid, details of the entire metering system, installation and operation, and the timing and quality of maintenance are also included. This book is dedicated to condensing and sharing the authors' extensive experience in solving flow measurement problems with design engineers, operating personnel (from top supervisors to the newest testers), academically-based engineers, engineers of the manufacturers of flow meter equipment, worldwide practitioners, theorists, and people just getting into the business. The authors' many years of experience are brought to bear in a thorough review of fluid flow measurement methods and applications Avoids theory and focuses on presentation of practical data for the novice and veteran engineer Useful for a wide range of engineers and technicians (as well as students) in a wide range of industries and applications