

Drilling Fluids Manual

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The - Jaun Garcia 2015-03-30

Pre-Order now! Learn never-before published solutions to common drilling problems and discover how to continually improve efficiency during drilling. The "Drillers Knowledge Book" covers all aspects of drilling, including well design and construction, hydraulic optimization, rock mechanics, drilling fluid processing and much more. Between them, the two distinguished authors have more than a century of drilling experience. Publication anticipated by the end first quarter 2015. IADC.

Manual on Drilling, Sampling, and Analysis of Coal -

Drilling for Water - Raymond Rowles
2017-09-29

There have been very few, if any, books of a practical nature covering the 'art' of drilling holes in the ground especially for water. Some rather lengthy tomes are and have been available over the years which have been pretty well incomprehensible to the average field man, or indeed, those responsible for the administration of field operations. Most of those books have been written by people with peripheral disciplines to the industry thus haven't had the field experience to really get hold of the heart of the matter. Drilling for Water - 2 has been written to be understandable to field personnel and in their own terms. Everything in it is based on considerable field experience. Following the publication of Drilling for Water, many accolades were forthcoming such as ...packed with information... ...my bible...

...most welcome... ...a breath of fresh air...

...couldn't put it down... etc.

Air and Gas Drilling Manual - William C. Lyons 2000-12-28

Be prepared for drilling's hottest trend According to the U.S. Department of Energy, by 2005, 30% of all wells will be drilled using gas and air. The Air and Gas Drilling Manual, by William Lyons -- an internationally known expert and holder of nine drilling patents -- lays out everything you need to apply air and gas drilling to all kinds of operations, from the most basic to the most complex, and for the shallowest to the deepest. You're shown how to: Master the air and gas drilling techniques in vital industries: construction and development of water wells, monitoring wells, geotechnical boreholes, mining operations boreholes, and more Calculate volumetric flow and compressor requirements. Drill with stable foam, unstable foam, and aerated liquids (as well as gas and air) Handle the special considerations of deep hole drilling Perform direct and reverse-flow circulation calculations Specify drills, collars, and casings Engineer and operate specialized downhole projects Plan operations and choose air package contractors

Air and Gas Drilling Manual - William C. Lyons 2000-12-07

Be prepared for drilling's hottest trend According to the U.S. Department of Energy, by 2005, 30% of all wells will be drilled using gas and air. The Air and Gas Drilling Manual, by William Lyons -- an internationally known expert and holder of nine drilling patents -- lays out

everything you need to apply air and gas drilling to all kinds of operations, from the most basic to the most complex, and for the shallowest to the deepest. You're shown how to: Master the air and gas drilling techniques in vital industries: construction and development of water wells, monitoring wells, geotechnical boreholes, mining operations boreholes, and more Calculate volumetric flow and compressor requirements. Drill with stable foam, unstable foam, and aerated liquids (as well as gas and air) Handle the special considerations of deep hole drilling Perform direct and reverse-flow circulation calculations Specify drills, collars, and casings Engineer and operate specialized downhole projects Plan operations and choose air package contractors

Petroleum Engineer's Guide to Oil Field

Chemicals and Fluids - Johannes Fink

2011-05-13

Petroleum Engineer's Guide to Oil Field

Chemicals and Fluids is a comprehensive manual that provides end users with information about oil field chemicals, such as drilling muds, corrosion and scale inhibitors, gelling agents and bacterial control. This book is an extension and update of *Oil Field Chemicals* published in 2003, and it presents a compilation of materials from literature and patents, arranged according to applications and the way a typical job is practiced. The text is composed of 23 chapters that cover oil field chemicals arranged according to their use. Each chapter follows a uniform template, starting with a brief overview of the chemical followed by reviews, monomers, polymerization, and fabrication. The different aspects of application, including safety and environmental impacts, for each chemical are also discussed throughout the chapters. The text also includes handy indices for trade names, acronyms and chemicals. Petroleum, production, drilling, completion, and operations engineers and managers will find this book invaluable for project management and production. Non-experts and students in petroleum engineering will also find this reference useful. Chemicals are ordered by use including drilling muds, corrosion inhibitors, and bacteria control Includes cutting edge chemicals and polymers such as water soluble polymers and viscosity control Handy index of chemical substances as

well as a general chemical index

So You Want to Be a Mud Engineer - Andy

Philips 2012-07-21

This is an introductory text for those interested in Drilling Mud Engineering. The novice will find this book answers many questions about the field. The experienced Mud Engineer will find a host of resources on various important topics.

Marine safety manual - United States. Coast Guard 1985

Ground Water Manual - United States. Bureau of Reclamation 1995

Air and Gas Drilling Manual - William C.

Lyons 2020-10-02

Air and Gas Drilling Manual, Fourth Edition: Applications for Oil, Gas and Geothermal Fluid Recovery Wells, and Specialized Construction Boreholes, and the History and Advent of the Directional DTH delivers the fundamentals and current methods needed for engineers and managers engaged in drilling operations. Packed with updates, this reference discusses the engineering modelling and planning aspects of underbalanced drilling, the impacts of technological advances in high angle and horizontal drilling, and the importance of new production from shale. In addition, an in-depth discussion is included on well control model planning considerations for completions, along with detailed calculation examples using Mathcad. This book will update the petroleum and drilling engineer with a much-needed reference to stay on top of drilling methods and new applications in today's operations. Provides key drilling concepts and applications, including unconventional activity and directional well by gas drilling Updated with new information and data on managed pressure drilling, foam drilling, and aerated fluid drilling Includes practical appendices with Mathcad equation solutions

Drilling Mud and Cement Slurry Rheology Manual - Comité des Techniciens, Chambre Syndicale de la Recherche et de la Production du Pétrole et du Gaz Naturel 2014-11-14

Multiservice Procedures for Well-Drilling

Operations - Department of the Army

2012-11-29

This manual, "Multiservice Procedures for Well-

Drilling Operations (FM 5-484),” is a guide for engineer personnel responsible for planning, designing, and drilling wells. This manual focuses on techniques and procedures for installing wells and includes expedient methods for digging shallow water wells, such as hand-dug wells. Engineer personnel assigned to well-drilling teams must have a basic understanding of groundwater principles and well-drilling mechanics and hydraulics to successfully install wells. A well driller enhances his skills primarily from experience in solving problems, overcoming obstacles in the field, and learning from failures. This manual reviews common experiences well drillers encounter in the field, including well installation and completion in North Atlantic Treaty Organization (NATO) countries.

Drilling Mud and Cement Slurry Rheology Manual - Comité des Techniciens, Chambre Syndicale de la Recherche et de la Production du Pétrole et du Gaz Naturel 2012-04-21

Hydraulic Fracturing Chemicals and Fluids Technology - Johannes Fink 2013-08-14

When classifying fracturing fluids and their additives, it is important that production, operation, and completion engineers understand which chemical should be utilized in different well environments. A user's guide to the many chemicals and chemical additives used in hydraulic fracturing operations, *Hydraulic Fracturing Chemicals and Fluids Technology* provides an easy-to-use manual to create fluid formulations that will meet project-specific needs while protecting the environment and the life of the well. Fink creates a concise and comprehensive reference that enables the engineer to logically select and use the appropriate chemicals on any hydraulic fracturing job. The first book devoted entirely to hydraulic fracturing chemicals, Fink eliminates the guesswork so the engineer can select the best chemicals needed on the job while providing the best protection for the well, workers and environment. Pinpoints the specific compounds used in any given fracturing operation Provides a systematic approach to classifying fracturing fluid technology to meet specific project needs Eliminates guesswork with easy-to-understand language on selection

and components of hydraulic fracturing chemicals Addresses environmental aspects of chemicals to safeguard employees and protect the environment

Drilling - The Australian Drilling 1997-06-10
Drilling: The Manual of Methods, Applications, and Management is all about drilling and its related geology, machinery, methods, applications, management, safety issues, and more. Of all the technologies employed by hydrologists, environmental engineers, and scientists interested in subsurface conditions, drilling is one of the most frequently used but most poorly understood. Now, for the first time, this industry-tested manual, developed by one of the world's leading authorities on drilling technology, is available to a worldwide audience.
Drilling Practices Manual - Preston L. Moore 1986

Air and Gas Drilling Manual - James H. Stanley 2020-09-22

Air and Gas Drilling Manual, Fourth Edition: Applications for Oil, Gas and Geothermal Fluid Recovery Wells, and Specialized Construction Boreholes, and the History and Advent of the Directional DTH delivers the fundamentals and current methods needed for engineers and managers engaged in drilling operations. Packed with updates, this reference discusses the engineering modelling and planning aspects of underbalanced drilling, the impacts of technological advances in high angle and horizontal drilling, and the importance of new production from shale. In addition, an in-depth discussion is included on well control model planning considerations for completions, along with detailed calculation examples using Mathcad. This book will update the petroleum and drilling engineer with a much-needed reference to stay on top of drilling methods and new applications in today's operations. Provides key drilling concepts and applications, including unconventional activity and directional well by gas drilling Updated with new information and data on managed pressure drilling, foam drilling, and aerated fluid drilling Includes practical appendices with Mathcad equation solutions
Remediation Manual for Petroleum Contaminated Sites - David L. Russell 1992-11-23

Based on proven investigation into cleanup techniques, the material in this manual gives engineers a working knowledge of the field and a basis for making key decisions during the cleanup process. It is easy to get petroleum into the ground, but hard to get it back out again. The problem does not exist in the groundwater or the soil alone, but in a dynamic balance between the soil, water, and air in the soil. Gasoline and any of its volatile components can and do move between the soil, air and water, and they cost billions of dollars every year in contamination cleanup. This new book provides the information needed for cost- and time-effective petroleum-contaminated site cleanup. Originally developed as an oil company's training aid, this book discusses the hows and whys of site cleanup-geology, data gathering, cleanup alternatives, remediation costs, and management of consultants/contractors Plus the book contains a critical examination of the benefits and limitations of each type of remediation technology. There is never only one way to clean up a particular site. The choice of the method of cleanup is one of the greatest factors affecting the cost. Another important cost factor is the level of cleanup required to satisfy the regulatory cleanup community. This new book will not only provide a fundamental understanding of site remediation techniques but also the knowledge to make cost-effective, environmentally-sound choices during the remediation process. Copies of this handy manual are available for immediate delivery. An order form follows the detailed table of contents on the reverse.

Air and Gas Drilling Manual - William C. Lyons
2009-01-15

The third edition of *Air and Gas Drilling Manual* describes the basic simulation models for drilling deep wells with air or gas drilling fluids, gasified two-phase drilling fluids, and stable foam drilling fluids. The models are the basis for the development of a systematic method for planning under balanced deep well drilling operations and for monitoring the drilling operation as well as construction project advances. *Air and Gas Drilling Manual* discusses both oil and natural gas industry applications, and geotechnical (water well, environmental, mining) industry applications. Important well

construction and completion issues are discussed for all applications. The engineering analyses techniques are used to develop pre-operations planning methods, troubleshooting operations monitoring techniques and overall operations risk analysis. The essential objective of the book is drilling and well construction cost management control. The book is in both SI and British Imperial units. Master the air and gas drilling techniques in construction and development of water wells, monitoring wells, geotechnical boreholes, mining operations boreholes and more 30% of all wells drilled use gas and air, according to the U.S. Department of Energy estimates Contains basic simulation equations with examples for direct and reverse circulation drilling models and examples for air and gas, gasified fluids, and stable foam drilling models

Theory and Application of Drilling Fluid Hydraulics - Alun Whittaker 1985-01-01

Technical Manual - United States Department of the Army 1957

Manual of Environmental Microbiology - Christon J. Hurst 2007-05-14

The most definitive manual of microbes in air, water, and soil and their impact on human health and welfare. • Incorporates a summary of the latest methodology used to study the activity and fate of microorganisms in various environments. • Synthesizes the latest information on the assessment of microbial presence and microbial activity in natural and artificial environments. • Features a section on biotransformation and biodegradation. • Serves as an indispensable reference for environmental microbiologists, microbial ecologists, and environmental engineers, as well as those interested in human diseases, water and wastewater treatment, and biotechnology.

Blowout and Well Control Handbook - Robert D. Grace 2017-05-26

Blowout and Well Control Handbook, Second Edition, brings the engineer and rig personnel up to date on all the useful methods, equipment, and project details needed to solve daily well control challenges. Blowouts are the most expensive and one of the most preventable accidents in the oil and gas industry. While some

rig crews experience frequent well control incidents, some go years before seeing the real thing. Either way, the crew must always be prepared with quick understanding of the operations and calculations necessary to maintain well control. Updated to cover the lessons learned and new technology following the Macondo incident, this fully detailed reference will cover detection of influxes and losses in equipment and methods, a greater emphasis on kick tolerance considerations, an expanded section on floating drilling and deepwater floating drilling procedures, and a new blowout case history from Bangladesh. With updated photos, case studies, and practice examples, *Blowout and Well Control Handbook, Second Edition* will continue to deliver critical and modern well control information to ensure engineers and personnel stay safe, environmentally-responsible, and effective on the rig. Features updated and new case studies including a chapter devoted to the lessons learned and new procedures following Macondo Teaches new technology such as liquid packer techniques and a new chapter devoted to relief well design and operations Improves on both offshore and onshore operations with expanded material and photos on special conditions, challenges, and control procedures throughout the entire cycle of the well

Composition and Properties of Drilling and Completion Fluids - Ryen Caenn 2011-09-29

The petroleum industry in general has been dominated by engineers and production specialists. The upstream segment of the industry is dominated by drilling/completion engineers. Usually, neither of those disciplines have a great deal of training in the chemistry aspects of drilling and completing a well prior to its going on production. The chemistry of drilling fluids and completion fluids have a profound effect on the success of a well. For example, historically the drilling fluid costs to drill a well have averaged around 7% of the overall cost of the well, before completion. The successful delivery of up to 100% of that wellbore, in many cases may be attributable to the fluid used. Considered the "bible" of the industry, *Composition and Properties of Drilling and Completion Fluids*, first written by Walter Rogers in 1948, and updated on a regular basis

thereafter, is a key tool to achieving successful delivery of the wellbore. In its Sixth Edition, *Composition and Properties of Drilling and Completion Fluids* has been updated and revised to incorporate new information on technology, economic, and political issues that have impacted the use of fluids to drill and complete oil and gas wells. With updated content on *Completion Fluids and Reservoir Drilling Fluids*, *Health, Safety & Environment*, *Drilling Fluid Systems and Products*, new fluid systems and additives from both chemical and engineering perspectives, *Wellbore Stability*, adding the new R&D on water-based muds, and with increased content on *Equipment and Procedures for Evaluating Drilling Fluid Performance* in light of the advent of digital technology and better manufacturing techniques, *Composition and Properties of Drilling and Completion Fluids* has been thoroughly updated to meet the drilling and completion engineer's needs. Explains a myriad of new products and fluid systems Cover the newest API/SI standards New R&D on water-based muds New emphases on Health, Safety & Environment New Chapter on waste management and disposal

IADC Drilling Manual - IADC Staff 2014-12-01
The IADC Drilling Manual, 12th edition, is the definitive manual for drilling operations, training, maintenance and troubleshooting. The two-volume, 26-chapter reference guide covers all aspects of drilling, with chapters on types of drilling rigs, automation, drill bits, casing and tubing, casing while drilling, cementing, chains and sprockets, directional drilling, downhole tools, drill string, drilling fluid processing, drilling fluids, hydraulics, drilling practices, floating drilling equipment and operations, high-pressure drilling hoses, lubrication, managed pressure drilling and related practices, power generation and distribution, pumps, rotating and pipehandling equipment, special operations, structures and land rig mobilization, well control equipment and procedures, and wire rope. A comprehensive glossary of drilling terms is also included. More than 900 color and black-and-white illustrations, 600 tables and thirteen videos. 1,158 pages. Copyright © IADC. All rights reserved.

Remediation Manual for Contaminated Sites - David L. Russell 2011-10-06

To ask the right question, one needs to have some idea of what the answer might be. So it is with remediation. There is no such thing as too much information when it comes to characterizing a site, as information can aid in selecting the best remediation options. Unfortunately, the collection of data for making an informed decision is often costly, forcing professionals to make decisions on incomplete data. The lack of accurate data can also lead to the wrong remediation method selections, unwanted surprises, and extra expense. Based on the author's more than 40 years of experience working on environmental projects, *Remediation Manual for Contaminated Sites* provides a practical guide to environmental remediation and cleanups. It presents a broad overview of the environmental remediation process, distilled into what one needs to know to evaluate a specific challenge or solve a remediation problem. The text offers guidance on tasks that range from managing consultants and contractors to gathering data, selecting a suitable remediation technology, and calculating remediation costs. The book includes remediation strategies for a variety of contaminants and examines a wide range of technologies for the remediation of water and soil, including excavation, wells, drainage, soil venting, vapor stripping, incineration, bioremediation, containment, solidification, vitrification, and phytoremediation. Written as a down-to-earth reference for professionals faced with the challenges of remediating a contaminated site, this book is also useful as a primer for students and those new to the field. It includes numerous figures, photographs, tables, and helpful checklists.

Drilling Fluid Engineering -

Drilling Fluids Processing Handbook - ASME Shale Shaker Committee 2011-03-15

Written by the Shale Shaker Committee of the American Society of Mechanical Engineers, originally of the American Association of Drilling Engineers, the authors of this book are some of the most well-respected names in the world for drilling. The first edition, *Shale Shakers and Drilling Fluid Systems*, was only on shale shakers, a very important piece of machinery on a drilling rig that removes drill cuttings. The

original book has been much expanded to include many other aspects of drilling solids control, including chapters on drilling fluids, cut-point curves, mud cleaners, and many other pieces of equipment that were not covered in the original book. Written by a team of more than 20 of the world's foremost drilling experts, from such companies as Shell, Conoco, Amoco, and BP There has never been a book that pulls together such a vast array of materials and depth of topic coverage in the area of drilling fluids Covers quickly changing technology that updates the drilling engineer on all of the latest equipment, fluids, and techniques
Drilling Fluids Optimization - James L. Lummus 1986

[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.

Drilling Mud and Cement Slurry Rheology Manual - Chambre syndicale de la recherche et de la production du pétrole et du gaz naturel. Groupe Fluides de forage et ciments 1982-01-15
Drilling Mud and Cement Slurry Rheology Manual

The Drilling Manual - Australian Drilling Industry Training Committee Limited 2015-04-01

An Invaluable Reference for Members of the Drilling Industry, from Owner-Operators to Large Contractors, and Anyone Interested In Drilling Developed by one of the world's leading authorities on drilling technology, the fifth edition of The Drilling Manual draws on industry expertise to provide the latest drilling methods, safety, risk management, and management practices, and protocols. Utilizing state-of-the-art technology and techniques, this edition thoroughly updates the fourth edition and introduces entirely new topics. It includes new coverage on occupational health and safety, adds new sections on coal seam gas, sonic and coil tube drilling, sonic drilling, Dutch cone probing, in hole water or mud hammer drilling, pile top drilling, types of grouting, and improved sections on drilling equipment and maintenance. New sections on drilling applications include underground blast hole drilling, coal seam gas drilling (including well control), trenchless technology and geothermal drilling. It contains heavily illustrated chapters that clearly convey the material. This manual incorporates forward-thinking technology and details good industry practice for the following sectors of the drilling industry: Blast Hole Environmental Foundation/Construction Geotechnical Geothermal Mineral Exploration Mineral Production and Development Oil and Gas: On-shore Seismic Trenchless Technology Water Well The Drilling Manual, Fifth Edition provides you with the most thorough information about the "what," "how," and "why" of drilling. An ideal resource for drilling personnel, hydrologists, environmental engineers, and scientists interested in subsurface conditions, it covers drilling machinery, methods, applications, management, safety, geology, and other related issues.

Earth Manual - United States. Bureau of Reclamation 1990

A Practical Handbook for Drilling Fluids Processing - Samuel Bridges 2020-02-15
A Practical Handbook for Drilling Fluids Processing delivers a much-needed reference for drilling fluid and mud engineers to safely understand how the drilling fluid processing operation affects the drilling process. Agitation and blending of new additions to the surface

system are explained with each piece of drilled solids removal equipment discussed in detail. Several calculations of drilled solids, such as effect of retort volumes, are included, along with multiple field methods, such as determining the drilled solids density. Tank arrangements are covered as well as operating guidelines for the surface system. Rounding out with a solutions chapter with additional instruction and an appendix with equation derivations, this book gives today's drilling fluid engineers a tool to understand the technology available and step-by-step guidelines of how-to safely evaluate surface systems in the oil and gas fields. Presents practical guidance from real example problems that are encountered on drilling rigs Helps readers understand multiple field methods and drilled solids calculations with the help of practice questions Gives readers what they need to master each piece of drilling fluid processing equipment, including mud cleaners and safe mud tank arrangements

Manual of Water Well Construction

Practices - United States. Environmental Protection Agency. Office of Water Supply 1976

Drilling Mud and Cement Slurry Rheology

Manual - Chambre Syndicale de la Recherche et de la Production du Pétrole et du Gaz Naturel. Comité des Techniciens 1982-10-31

Drilling Fluids, Mud Pumps, and Conditioning Equipment - Kate Van Dyke 1998

This series covers the entire scope of rotary drilling operations in five units of technical information and review questions. These units are published in cooperation with the International Association of Drilling Contractors. In some cases, previous editions are available in Spanish, while supplies last, for \$14. Open-book comprehensive tests covering Units I, II, III, and V of the Rotary Drilling Series are available. This totally new lesson combines Mud Pumps and Conditioning Equipment and Circulating Systems. It offers a better understanding of the operation, care, and maintenance of mud pumps and mud conditioning equipment. Discusses the composition, testing, and treatment of drilling fluids and the route of circulation. All measurements are given in both U.S. and SI

units. Many illustrations, a complete glossary, and review questions and answers are also provided.

Development Geology Reference Manual - Diana Morton-Thompson 1993

Well Cementing - E.B. Nelson 1990-09-24

Cementing is arguably the most important operation performed on a well. Well cementing technology is an amalgam of many interdependent scientific and engineering disciplines which are essential to achieve the primary goal of well cementing - zonal isolation. This textbook is a comprehensive and up-to-date reference concerning the application of these disciplines to cementing a well. "Well Cementing" is envisioned as an upper-level university book, as well as a reference for practicing engineers and scientists. The first section of the book illustrates how the quality of the hydraulic seal provided by the cement sheath can affect well performance. The second section concentrates on the design phase of a cementing treatment, and various aspects of cement job execution are covered in the third section. The fourth section addresses cement job evaluation. The text is supported by many tables and figures, an extensive bibliography and an

index. There are also chapters devoted to subjects which are currently of particular interest to the industry, including the prevention of annular gas migration, foamed cements, and cementing horizontal wellbores. The chemistry associated with well cementing is presented in detail. Most of the contributors to this volume are employees of Dowell Schlumberger, one of the leading companies in this field.

Air and Gas Drilling Manual - Suhas Kulkarni 2015-03-01

This book is written as a practical reference for engineers and earth scientists who are engaged in planning and carrying out deep air and gas drilling operations. The book covers air (or gas) drilling fluids, aerated (gasified) drilling fluids, and foam drilling. Further, from the mechanical rock destruction standpoint, the book covers conventional rotary drilling, downhole positive displacement motor (PDM) drilling, and down-the-hole hammer (DTH) drilling. The entire engineering material in both the USCS and SI unit systems, including the important equations used for air (or gas) drilling and aerated (gasified) drilling, along with the foam drilling calculations. Solutions based on these equations are given in MathCad, using both USCS and SI units.