

1. Record Nr.	UNINA9910797393403321
Autore	Fink Johannes Karl
Titolo	Petroleum engineer's guide to oil field chemicals and fluids [[electronic resource] /] / Johannes Karl Fink
Pubbl/distr/stampa	Amsterdam ; ; Boston, : Gulf Professional Publishing, c2012
ISBN	0-12-383845-2 9786613114730 1-283-11473-9
Edizione	[2nd edition]
Descrizione fisica	1 online resource (854 pages)
Altri autori (Persone)	FinkJohannes Karl
Disciplina	622/.3382/028
Soggetti	Oil field chemicals Petroleum engineers
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	<p>""Front Cover""; ""Petroleum Engineer's Guide to Oil Field Chemicals and Fluids""; ""Copyright""; ""Preface to Second Edition""; ""Preface""; ""How to Use This Book""; ""Index""; ""Bibliography""; ""Acknowledgments""; ""Contents""; ""Chapter 1: Drilling muds""; ""1.1 Classification of muds""; ""1.1.1 Dispersed noninhibited systems""; ""1.1.2 Phosphate-treated muds""; ""1.1.3 Lignite muds""; ""1.1.4 Quebracho muds""; ""1.1.5 Lignosulfonate muds""; ""1.1.6 Lime muds""; ""1.1.7 Sea water muds""; ""1.1.8 Nondispersed noninhibited systems""; ""1.1.9 Low-solids fresh water muds""</p> <p>""1.1.10 Variable density fluids""""1.1.11 Gas-based muds""; ""1.1.12 Drill-in fluids""; ""Heavy brine completion fluids""; ""1.2 Mud compositions""; ""1.2.1 Inhibitive water-based muds""; ""1.2.2 Water-based muds""; ""Compositions with improved thermal stability""; ""Shale encapsulator""; ""Membrane formation""; ""1.2.3 Oil-based drilling muds""; ""Poly(ether)cyclicpolyols""; ""Emulsifier for deep drilling""; ""Biodegradable composition""; ""Electric conductive nonaqueous mud""; ""Water removal""; ""1.2.4 Synthetic muds""; ""1.2.5 Inverted emulsion drilling muds""; ""Esters""; ""Acetals""</p> <p>""Anti-settling properties""""Glycosides""; ""Miscellaneous""; ""Reversible phase inversion""; ""1.2.6 Foam drilling""; ""1.2.7 Chemically enhanced drilling""; ""Temperature and salinity effects""; ""1.2.8 Supercritical</p>

carbon dioxide drilling"; "1.3 Additives"; "1.3.1 Thickeners";  
"Polymers"; "pH responsive thickeners"; "Mixed metal hydroxides";  
"1.3.2 Lubricants"; "Hagfish slime"; "1.3.3 Bacteria"; "1.3.4  
Corrosion inhibitors"; "1.3.5 Viscosity control"; "1.3.6 Clay  
stabilization"; "1.3.7 Formation damage"; "1.3.8 Shale stabilizer";  
"1.3.9 Fluid loss additives"  
"Water swellable polymers" "Shear degradation of lost circulation  
materials"; "Anionic association polymer"; "Fragile gels";  
"Aphrons"; "Permanent grouting"; "1.3.10 Scavengers"; "Oxygen  
scavenger"; "Hydrogen sulfide removal"; "1.3.11 Surfactants";  
"Surfactant in hydrocarbon solvent"; "Biodegradable surfactants";  
"Deflocculants and dispersants"; "Shale stabilizing surfactants";  
"Toxicity"; "Defoamers"; "1.3.12 Hydrate inhibitors"; "1.3.13  
Weighting materials"; "Barite"; "Ilmenite"; "Carbonate"; "Zinc  
oxide, zirconium oxide, and manganese tetroxide"  
"Hollow glass microspheres" "1.3.14 Organoclay compositions";  
"Biodegradable organophilic clay"; "Poly(vinyl neodecanoate)";  
"1.3.15 Miscellaneous"; "Reticulated bacterial cellulose";  
"Scleroglucan"; "Uintaite"; "Sodium asphalt sulfonate"; "Formation  
damage by gilsonite and sulfonated asphalt"; "Illitic sandstone  
outcrop cores"; "1.3.16 Multicomponent additives"; "1.4 Cleaning  
operations"; "1.4.1 Cuttings removal"; "1.4.2 Junk removal"; "1.4.3  
Filter cake removal"; "1.5 Drilling fluid disposal"; "1.5.1 Toxicity";  
"1.5.2 Conversion into cements"  
"1.5.3 Environmental regulations"

---

## Sommario/riassunto

The oil and gas engineer on the job requires knowing all the available oil field chemicals and fluid applications that are applicable to the operation. Updated with the newest technology and available products, Petroleum Engineer's Guide to Oil Field Chemicals and Fluids, Second Edition, delivers all the necessary lists of chemicals by use, their basic components, benefits, and environmental implications. In order to maintain reservoir protection and peak well production performance, operators demand to know all the options that are available. Instead of searching through various sources

---