1. Record Nr. UNINA9910462019003321 Autore Green Don W Titolo Enhanced oil recovery [[electronic resource] /] / Don W. Green and G. Paul Willhite Richardson, TX,: Henry L. Doherty Memorial Fund of AIME, Society of Pubbl/distr/stampa Petroleum Engineers, 1998 **ISBN** 1-61399-161-4 Descrizione fisica 1 online resource (557 p.) Collana SPE textbook series;; vol. 6 Altri autori (Persone) WillhiteG. Paul Disciplina 622/.338/015118 Soggetti Secondary recovery of oil Petroleum industry and trade Electronic books. Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Description based upon print version of record. Note generali Nota di bibliografia Includes bibliographical references and indexes. ""Introduction""; ""Preface""; ""Acknowledgments""; ""Contents""; ""1-Nota di contenuto Introduction to EOR Processes""; ""1.1 Definition of EOR""; ""1.2 Target Oil Resource for EOR Processes"": ""1.3 Idealized Characteristics of an EOR Process""; ""1.4 General Classifications and Description of EOR Processes""; ""1.5 Potential of the Different Processes""; ""1.6 Screening Criteria for Process Applicability""; ""1.7 Organization of the Textbook""; ""2-Microscopic Displacement of Fluids in a Reservoir""; ""2.1 Introduction""; ""2.2 Capillary Forces""; ""2.3 Viscous Forces""; ""2.4 Phase Trapping"" ""2.5 Mobilization of Trapped Phasesa€? Alteration of Viscous/Capillary Force Ratio""""3-Displacement in Linear Systems""; ""3.1 Introduction""; ""3.2 Waterflood Performancea€?Frontal-Advance Equations""; ""3.3 Viscous Waterflood in a Linear System""; ""3.4 Viscous Waterflood of a Linear System Initially at Interstitial Water Saturation""; ""3.5 Chemical Flooding in a Linear System""; ""3.6 Applications of the Chemical Flooding Model""; ""3.7 Displacement of Slugs""; ""3.8 Dispersion During Miscible Displacement""; ""3.9 Viscous Fingeringa€?Instability in Displacement Fronts" ""4-Macroscopic Displacement of Fluids in a Reservoir"""4.1 Introduction""; ""4.2 Volumetric Displacement Efficiency and Material

Balance"": ""4.3 Volumetric Displacement Efficiency Expressed as the

Product of Areal and Vertical Displacement Efficiencies"; ""4.4 Definition and Discussion of Mobility Ratio""; ""4.5 Areal Displacement Efficiency""; ""4.6 Vertical Displacement Efficiency""; ""4.7 Volumetric Displacement Efficiency""; ""5-Mobility-Control Processes""; ""5.1 Introduction""; ""5.2 Process Description""; ""5.3 Physical and Chemical Characteristics of Polymers""

""5.4 Flow of Polymer's Through Porous Media"""5.5 Polymer-Augmented Waterflood""; ""5.6 In-Situ Permeability Modification""; ""5.7 Field Experience""; ""5.8 Mobility Control To Maintain Chemical Slug Integrity""; ""5.9 Foam as an EOR Agent""; ""5.10 WAG Process""; ""6-Miscible Displacement Processes""; ""6.1 Introduction""; ""6.2 General Description of Miscible Displacement""; ""6.3 Principles of Phase Behavior Related to Miscibility""; ""6.4 FCM Process""; ""6.5 MCM Process""; ""6.6 Experimental Verification of the Role of Phase Behavior in Miscible Displacement""

""6.7 Measurement and Prediction of the MMP or MME in a Multiple-Contact Process"""6.8 Fluid Properties in Miscible Displacement""; ""6.9 Factors Affecting Microscopic and Macroscopic Displacement Efficiency of Miscible Processes""; ""6.10 Miscible Displacement Performance Modeling""; ""6.11 Design Procedures and Criteria""; ""6.12 Field Experience""; ""7-Chemical Flooding""; ""7.1 Introduction""; ""7.2 Description of the Micellar/Polymer Process""; ""7.3 Surfactants""; ""7.4 Phase Behavior of Microemulsions""; ""7.5 Phase Behavior and IFT"" ""7.6 Variables Affecting Phase Behavior and IFT""