Record Nr. UNINA9911006652903321 Autore Zemel Bernard **Titolo** Tracers in the oil field / / Bernard Zemel Pubbl/distr/stampa Amsterdam;; New York,: Elsevier, 1995 **ISBN** 1-281-03459-2 9786611034597 0-08-054314-6 Edizione [1st ed.] Descrizione fisica 1 online resource (515 p.) Collana Developments in petroleum science:: 43 Disciplina 622/.3382 Soggetti Oil field chemicals Tracers (Chemistry) Radioactive tracers 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 index. Nota di contenuto Front Cover: tracers in the oil field: Copyright Page: TABLE OF CONTENTS; Preface; Acknowledgments; Credits; Chapter One. Radioactivity Basics; INTRODUCTION; RADIOACTIVITY; INTERACTIONS OF RADIATION WITH MATTER; SOURCES OF RADIOACTIVE MATERIAL; REFERENCES; Chapter Two. Measurements and Applications; INTRODUCTION: RADIATION DETECTION AND MEASUREMENT: CHARGE COLLECTION IN GAS COUNTERS; COUNTING SYSTEMS; SCINTILLATION DETECTORS; SOLID STATE IONIZATION DETECTORS; NEUTRON DETECTORS; COUNT RATE METERS, MULTICHANNEL ANALYZERS, AND SCALERS; COUNTING RADIOACTIVE ATOMS; USEFUL NUCLEAR **PROCEDURES** DOSIMETRYLICENSING AND CONTROL OF RADIOACTIVE MATERIAL: REFERENCES; Chapter Three. Interwell Water Tracers; INTRODUCTION; FUNCTIONS OF A WATERFLOODING TRACER; RADIOACTIVELY TAGGED TRACERS FOR WATERFLOODS; NONRADIOACTIVELY TAGGED TRACERS FOR WATERFLOODS: TRACER SAMPLING AND ANALYSIS IN THE FIELD: REFERENCES: Chapter Four. Field Examples and Data Analysis: INTRODUCTION; FIELD TRACER REPORTS; VOLUMETRIC ANALYSIS OF

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Sommario/riassunto

This book is concerned with the application of tracers to a wide variety of oil field operations. It provides the necessary nuclear concepts and techniques which are basic to oil field tracer applications. Laboratory and field techniques are explained and illustrated as are the associated regulatory and safety aspects. Within the book, each area of oil field use is considered separately and specific applications of tracers discussed and relevant literature reviewed. The use of non-radioactive tracers is pointed out wherever it is applicable. Due to the nature of this competitive industry, mu