1. Record Nr. UNINA9910790585203321 Autore Moore Clyde H Titolo Carbonate reservoirs: porosity and diagenesis in a sequence stratigraphic framework / / Clyde H. Moore, Colorado School of Mines, Golden, CO, Louisiana State University, Baton Rouge, LA, USA, William J. Wade, Applied Tomographics Inc., Flagstaff, AZ, USA Amsterdam, Netherlands; Oxford, England, Elsevier, c2013 Pubbl/distr/stampa Amsterdam:,: Elsevier,, 2013 **ISBN** 0-444-53832-1 Edizione [2nd ed.] Descrizione fisica 1 online resource (xiii, 374 pages): illustrations (some color), maps Developments in Sedimentology;; Volume 67 Collana Disciplina 552.58 Soggetti Carbonate rocks Diagenesis Porosity Sequence stratigraphy Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia "ISSN: 0070-4571." Note generali Includes bibliographical references and index. Nota di bibliografia Nota di contenuto Front Cover; Carbonate Reservoirs: Porosity and Diagenesis in a Sequence Stratigraphic Framework; Copyright; Contents; Preface to the Second Edition; Acknowledgments; Part 1: The Carbonate Depositional System; Chapter 1: The Basic Nature of Carbonate Sediments and Sedimentation: Introduction: Marine Carbonates: Biotically Controlled Precipitation (Skeletal Carbonates); Biotically Induced Precipitation (Muds and Mud Mounds); Carbonate Factories; The Framework Reef, a Unique Depositional Environment; Unique Biological Control over the Texture and Fabric of Carbonate Sediments Carbonate Grain CompositionCarbonate Rock Classification; Efficiency of the Carbonate Factory and Its Impact on Patterns of Carbonate Sedimentation; Geometry of Carbonate Depositional Environments; Contrasting Geometries of the Three Carbonate Factories; Facies Tracts of the Tropical Carbonate Factory; Facies Tracts of the Cool-Water Carbonate Factory: Facies Tracts of the Mud-Mound Carbonate Factory:

Lacustrine Carbonates; Summary; Chapter 2: The Application of the Concepts of Sequence Stratigraphy to Carbonate Rock Sequences;

Introduction

Sequence Stratigraphy of the Tropical Carbonate FactoryCharacteristics Central to the Development of Stratigraphic Sequences in the Tropical Carbonate Factory (Modified from Moor ...; The Tropical Carbonate Factory Sedimentary Sequence; Shallow-Water Facies of Tropical Carbonate Factory Systems Tracts; Sequence Boundaries in Tropical Carbonate Factory Sequences; Tropical Periplatform Environment; Megabreccias: Mixed Carbonates and Siliciclastics: Sequence Stratigraphy of the Cool Water Carbonate Factory Characteristics of Cool Water Carbonates Important to Sequence Stratigraphy (After James and Clark, 1997 Schlager, 2005); Cool Water Carbonate Sequence Stratigraphic Model; Sequence Stratigraphy of the Mud Mound Carbonate Factory; Characteristics of the Mud Mound Carbonate Factory Important to Sequence Stratigraphy (Modified from Schlager, 2005); Mud Mound Carbonate Factory Sequences and Their Bounding Surfaces; Sequence Stratigraphy of Lacustrine Carbonates; Defining Characteristics of Stratigraphic Sequences in Lacustrine Carbonates; Summary

Chapter 3: The Impact of Global Tectonics and Biologic Evolution on the Carbonate SystemIntroduction; Global Tectonics; Carbonate Platform Development During a Tectonic Supercycle; Phanerozoic Climate Supercycles: Icehouse and Greenhouse; The Impact of Global Climate Cycles (Icehouse/Greenhouse) on Carbonate Platforms and Their Development; The Impact of Global Climate Supersequences (Greenhouse/Icehouse) on Abiotic Carbonate Mineralogy and Dolomitization; Biologic Evolution; Impact of Biologic Evolution on Carbonate Platform Development

Impact of Biologic Evolution on the Mineralogy of Carbonate Skeletal Sediments

Sommario/riassunto

The 2nd Edition of Carbonate Reservoirs aims to educate graduate students and industry professionals on the complexities of porosity evolution in carbonate reservoirs. In the intervening 12 years since the first edition, there have been numerous studies of value published that need to be recognized and incorporated in the topics discussed. A chapter on the impact of global tectonics and biological evolution on the carbonate system has been added to emphasize the effects of global earth processes and the changing nature of life on earth through Phanerozoic time on all aspec