Record Nr. UNINA9910146251103321 Clay mineral cements in sandstones [[electronic resource] /] / edited by **Titolo** Richard H. Worden and Sadoon Morad Pubbl/distr/stampa Malden, MA,: Blackwell Pub., c2003 **ISBN** 1-4443-0433-X 9786612042409 1-282-04240-8 1-4443-0434-8 Descrizione fisica 1 online resource (523 p.) Collana Special publication number 34 of the International Association of Sedimentologists MoradSadoon Altri autori (Persone) WordenRichard H Disciplina 549.6 549/.6 553.53 Clay minerals Soggetti Sandstone 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 Clay Mineral Cements in Sandstones; Contents; Introduction; Acknowledgements; Review papers; Clay minerals in sandstones: controls on formation, distribution and evolution; Predictive diagenetic clay-mineral distribution in siliciclastic rocks within a sequence stratigraphic framework; Oxygen and hydrogen isotopic composition of diagenetic clay minerals in sandstones: a review of the data and controls; Palaeoclimate controls on spectral gamma-ray radiation from sandstones; Smectite in sandstones: a review of the controls on occurrence and behaviour during diagenesis Patterns of clay mineral diagenesis in interbedded mudrocks and sandstones: an example from the Palaeocene of the North SeaCrossformational flux of aluminium and potassium in Gulf Coast (USA) sediments: Silicate-carbonate reactions in sedimentary systems: fluid

> composition control and potential for generation of overpressure; Experimental studies of clay mineral occurrence; Effect of clay content

upon some physical properties of sandstone reservoirs; Quantitative analysis of clay and other minerals in sandstones by X-ray powder diffraction (XRPD)

A review of radiometric dating techniques for clay mineral cements in sandstonesChlorite case study; Chlorite authigenesis and porosity preservation in the Upper Cretaceous marine sandstones of the Santos Basin, offshore eastern Brazil; Kaolinite case studies; Origin and diagenetic evolution of kaolin in reservoir sandstones and associated shales of the Jurassic and Cretaceous, Salam Field, Western Desert (Egypt); Microscale distribution of kaolinite in Breathitt Formation sandstones (middle Pennsylvanian): implications for mass balance The role of the Cimmerian Unconformity (Early Cretaceous) in the kaolinitization and related reservoir-quality evolution in Triassic sandstones of the Snorre Field, North SeaThe formation and stability of kaolinite in Brent sandstone reservoirs: a modelling approach; Illite case studies; Illite fluorescence microscopy: a new technique in the study of illite in the Merrimelia Formation, Cooper Basin, Australia; Geochemical modelling of diagenetic illite and quartz cement formation in Brent sandstone reservoirs: example of the Hild Field, Norwegian North Sea

The effect of oil emplacement on diagenetic clay mineralogy: the Upper Jurassic Magnus Sandstone Member, North SeaGlauconite case study; Application of glauconite morphology in geosteering and for on-site reservoir quality assessment in very fine-grained sandstones: Carnarvon Basin, Australia; Index; Colour plates

Sommario/riassunto

Clay minerals are one of the most important groups of minerals that destroy permeability in sandstones. However, they also react with drilling and completion fluids and induce fines migration during hydrocarbon production. They are a very complex family of minerals that are routinely intergrown with each other, contain a wide range of solid solutions and form by a variety of processes under a wide range temperatures and rock and fluid compositions.

ln this volume, clay minerals in sandstones are reviewed in terms of their mineralogy and general occurrence, their stable and radiogenic i

Record Nr. UNINA9910794799103321 **Titolo** Hands-on science and technology. Grade 4 Ontario: an inquiry approach / / series editor, Jennifer Lawson Pubbl/distr/stampa Winnipeg, Manitoba:,: Portage & Main Press,, [2018] ©2018 **ISBN** 1-55379-939-9 Descrizione fisica 1 online resource (349 pages) Collana Hands-On Science and Technology for Ontario 372.35044 Disciplina Soggetti Science - Study and teaching (Elementary) - Activity programs Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Nota di bibliografia Includes bibliographical references. Intro -- Introduction to Hands-On Science and Technology for Nota di contenuto Ontario, Grade 4 -- Introduction to Hands-On Science and

2.

Technology -- Program Introduction -- The Inquiry Approach to Science and Technology -- 21st Century Teaching and Learning -- The Goals of the Science and Technology Program -- Hands-On Science and Technology Strands and Expectations -- Hands-On Science and Technology Fundamental Concepts and Big Ideas -- Hands-On Science and Technology Program Principles -- Infusing Indigenous Perspectives -- Cultural Connections -- Land-Based Learning -- Technology --Sustainability -- Program Implementation -- Program Resources --Classroom Environment -- Planning Units-Timelines -- Classroom Management -- Classroom Safety -- Scientific Inquiry Skills: Guidelines for Teachers -- Observing -- Questioning -- Exploring -- Classifying -- Measuring -- Communicating, Analyzing, and Interpreting --Predicting -- Inferring -- Inquiry Through Investigation and Experiments -- Inquiry Through Research -- Online Considerations --Addressing Students' Literacy Needs -- Technological Problem Solving -- Makerspace -- The Hands-On Science and Technology Assessment Plan -- Assessment for Learning -- Assessment as Learning --Assessment of Learning -- Performance Assessment -- Portfolios --Evidence of Student Achievement Levels for Evaluation -- Important Note to Teachers -- References -- Assessment Reproducibles --Achievement Chart for Science and Technology -- Unit 1 Habitats and

Communities -- Introduction -- Unit Overview -- Curriculum Correlation -- Resources for Students -- What Do We Know About Habitats and Communities? -- Why Do Plants and Animals Live in Certain Habitats? -- Which Organisms Are Found in Our Local Habitats? -- How Can We Measure Populations in a Habitat?. How Do Plants and Animals Adapt to Survive in Their Environment? --What Relationships Occur Between Populations Within a Community? --What Are the Characteristics of Herbivores, Carnivores, and Omnivores? -- What Are the Relationships Between Predators, Prev. and Scavengers? -- What Are the Characteristics of Producers, Consumers, and Decomposers? -- What Is a Food Chain? -- What Is a Food Web? --How Are Plants and Animals Important to Humans and to the Environment? -- How Can We Create Living Habitats? -- What Are Some Natural and Human Impacts on Organisms in the Environment? --Inquiry Project: What Can I Do to Protect Habitats and Communities? --Unit 2 Pulleys and Gears -- Introduction -- Unit Overview --Curriculum Correlation -- Resources for Students -- What Do We Know About Forces and Machines? -- How Do Wheels and Axles Work? --How Do Gears Help Make Work Easier? -- What Can We Learn About Gears and Direction of Movement? -- How Can We Design and Construct Devices With Working Gears? -- How Does a Single-Fixed Pulley Make Work Easier? -- How Do Movable and Compound Pulleys Make Work Easier? -- How Can We Design and Construct a Working Pulley System? -- What Are the Advantages and Disadvantages of Using Machines With Pulleys and Gears? -- Inquiry Project: How Can We Design and Build a System of Pulleys and Gears for a Specific Purpose? -- Unit 3 Light and Sound -- Introduction -- Unit Overview --Curriculum Correlation -- Resources for Students -- What Do We Know About Light? -- How Does Light Travel? -- How Does Light Reflect? --How Well Does Light Pass Through Different Materials? -- How Can We See Light's Many Colours? -- How Has Light Technology Changed Over Time? -- Inquiry Project: How Can I Design and Construct an Optical Device to Transmit and Reflect Light? -- What Do We Want to Learn About Sound?.

How Is Sound Created? -- What Is Pitch? -- How Do Sound Waves Travel? -- Which Materials Are Insulators or Conductors of Sound? -- How Can We Amplify Sound? -- How Do We Hear Sound, and How Can We Protect Our Sense of Hearing -- How Do Musical Instruments Use Sound Energy? -- How Can We Design and Construct Musical Instruments Using Various Materials? -- Inquiry Project: What Can We Learn About Sound Technology? -- Unit 4 Rocks and Minerals -- Introduction -- Unit Overview -- Curriculum Correlation -- Resources for Students -- What Do We Know About Rocks and Minerals? -- How Can We Compare and Classify Rocks and Minerals? -- How Can Minerals Be Classified? -- What Are Some Uses for Rocks and Minerals? -- How Are Fossils Formed? -- Inquiry Project: How Are Rocks and Minerals Mined From the Earth? -- How Does Mining Impact Habitats and Communities? -- References -- Appendix: Image Banks -- About the Contributors.