Record Nr. UNINA9910647393603321 Autore Dahi Taleghani Arash Titolo Wellbore Integrity [[electronic resource]]: From Theory to Practice // by Arash Dahi Taleghani, Livio Santos Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa 2023 **ISBN** 3-031-19024-6 Edizione [1st ed. 2023.] Descrizione fisica 1 online resource (264 pages) 622.24 Disciplina Soggetti Cogeneration of electric power and heat Fossil fuels Geotechnical engineering **Energy policy** Energy and state Sustainability Fossil Fuel Geotechnical Engineering and Applied Earth Sciences Energy Policy, Economics and Management Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di bibliografia Includes bibliographical references and index. Preface -- Well Integrity Concept Evolution -- Well Integrity Assurance Nota di contenuto -- Leakage of Annular Cements Barriers -- Field Operation Impacts --Diagnostic Methods: Integrity Tests -- Diagnostic Methods: Well Logging Methods -- Mechanical Analysis of Cement Integrity -- Sealant and Elastomers -- Remediation of Producing Well Integrity Downhole Intervention -- Well Plugging and Abandonment (P&A) -- Closing Remarks. Sommario/riassunto There have been concerns about the integrity of thousands of wells drilled worldwide for different purposes ranging from oil and gas to geological carbon sequestration. This is the first book to integrate different aspects of wellbore integrity into a single volume. It looks at the energy sector's green wave movement by expanding an important

topic for practitioners, regulators, and students. It is an area where petroleum and subsurface engineers will increasingly need to be

involved in the future to address growing expectations regarding environmental impacts and sustainability. Coverage also includes recent developments in regulations and R&D with indications on emerging areas. Wellbore Integrity: From Theory to Practice will be a valuable resource for practicing engineers and students working on problems related to subsurface energy, subsurface disposals, and environmental impacts of oil and gas wells. In parallel, it will be a valuable reference for engineers and scientists interested in repurposing existing wells for carbon sequestration or geothermal purposes. First single-volume guide on wellbore integrity Looks at recent industry developments and regulations Coverage ranges from oil and gas to geological carbon sequestration.