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Titolo	Introduction to Permanent Plug and Abandonment of Wells [[electronic resource] /] / by Mahmoud Khalifeh, Arild Saasen
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Descrizione fisica	1 online resource (XVIII, 273 p. 183 illus., 138 illus. in color.)
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Soggetti	Ocean engineering Geotechnical engineering Energy policy Energy and state Offshore Engineering Geotechnical Engineering & Applied Earth Sciences Energy Policy, Economics and Management
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Nota di contenuto	Introduction -- General Principles of Well Barriers -- Specification for Permanent Plugging Materials -- Types of Permanent Plugging Materials -- Different Categories of Working Units -- Work classification and selection of working units -- Fundamentals of Plug Placement -- Verification of placement operation -- Tools and Techniques for Plug and Abandonment -- Barrier Verification.
Sommario/riassunto	This open access book offers a timely guide to challenges and current practices to permanently plug and abandon hydrocarbon wells. With a focus on offshore North Sea, it analyzes the process of plug and abandonment of hydrocarbon wells through the establishment of permanent well barriers. It provides the reader with extensive knowledge on the type of barriers, their functioning and verification. It then discusses plug and abandonment methodologies, analyzing different types of permanent plugging materials. Last, it describes some tests for verifying the integrity and functionality of installed

permanent barriers. The book offers a comprehensive reference guide to well plugging and abandonment (P&A) and well integrity testing. The book also presents new technologies that have been proposed to be used in plugging and abandoning of wells, which might be game-changing technologies, but they are still in laboratory or testing level. Given its scope, it addresses students and researchers in both academia and industry. It also provides information for engineers who work in petroleum industry and should be familiarized with P&A of hydrocarbon wells to reduce the time of P&A by considering it during well planning and construction.