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Titolo	Understanding Oil and Gas Shows and Seals in the Search for Hydrocarbons // by John Dolson
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ISBN	3-319-29710-4
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (XIX, 486 p. 341 illus., 315 illus. in color.)
Disciplina	662.6
Soggetti	Fossil fuels Mineral resources Economic geology Energy harvesting Geotechnical engineering Energy systems Fossil Fuels (incl. Carbon Capture) Mineral Resources Economic Geology Energy Harvesting Geotechnical Engineering & Applied Earth Sciences Energy Systems
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Introduction to the oil industry and oil show evaluation: a personal retrospective -- The basics of traps, seals, reservoirs and shows -- Drilling, mud logging, wireline logs and cores -- Understanding seals, pressures and hydrodynamics -- Quantifying seals and saturations—capillary pressure, pseudo-capillary pressure and quantitative show assessment -- Basic well log analysis, quick look techniques, pitfalls and volumetrics -- Using fluid inclusion data in exploration -- Shows and geochemistry: extracting more information from source rocks and hydrocarbons -- Building and testing migration models -- Appendices -- Common conversion equations and fluid classifications --

Constructing Winland pore throat graphs in Excel -- Equations in Excel to convert mercury-injection capillary pressure data to height above free water -- Equations in Excel to make pseudo-capillary pressure curves -- Converting paleogeographic maps or shapefiles in ARCGIS to grids.

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Sommario/riassunto

The book covers in detail the ways to differentiate between residual and continuous phase (trapped) oil, false shows and shows associated with source rocks and tight oil and gas reservoirs (potential unconventional targets). Case histories of finding by-passed plays, new migration routes and new fields will be shown for each major topic. All of these materials are presented in the context of modern petroleum systems modeling of migration and charge, with an emphasis on how to calibrate and test the validity of the computer models. Lastly, exercises are included to reinforce the concepts in each chapter.

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