

The Integration of geology, geophysics, petrophysics and petroleum engineering in reservoir delineation, description and management; the proceedings of the 1st Archie Conference Oct 22 -25, 1990

edited by Robert Sneider, Wolf Massell, Rob Mathis, Dennis Loren and Paul Wichmann, published by the APPG.

Review by Christopher G. Kendall

This proceedings text represents the latest word on how the integration of a variety of geological disciplines are being used for unravelling the complexities of hydrocarbon reservoirs. As one might imagine this proceedings contains a pot puree of papers and abstracts that cover the electric gamut from: multidisciplinary studies which tie seismic, geology, log analysis, reservoir engineering, and production modeling from Indonesia, to the North Sea and the USA; reservoir characterization using petrophysical formation evaluation and rock description and given in papers dealing with general concepts to specific studies of fields and outcrops; reservoir characterization and modeling with papers using log analysis to a 3D interactive system; reservoir properties prediction with two abstracts on Sable Island of Nova Scotia and the Smackover trend in Alabama associated with basement granite knobs; the origin, description, and evaluation of fractured reservoirs with a combination of schemes to describe fractures and case studies involving well data, seismic and relational computer data base manipulators; how to create, manage, and evaluate multidisciplinary teams with papers on how various organisations have done this; integrated field studies with papers describing how these were carried out; 2D and 3D reservoir delineation; and the final section on the utilization of geoscience and engineering technologies with examples from a variety of fields and locals.

Because this book represents the proceedings of a conference the papers vary widely in quality and content. Some of the papers are abstracts alone, others are cursory but many are most professional and complete. Unless you are intimately involved with integrated studies of hydrocarbon reservoirs you should not probably pop out and buy this book for your personal shelves, but should instead advise your employers library to purchase it so you can get hold of it when you need access to information on a specific topic or locality. I am glad to own the book but don't think I would buy it myself.

The largest section in the book was devoted to fractured reservoirs, while to me the most interesting section in the text contained papers on managing interdisciplinary groups. I also particularly enjoyed a paper published by an ARCO research group on the use of MacIntosh HyperCard stacks.

I was not too impressed with the reproduction quality of the text, which was variable to say the least. AAPG had the printer apparently use photographic techniques for reproducing both the text as well as the illustrations. The problem was that the reproduction was often slightly enough out of focus to annoy this reader as he tracked down the theme being read. One does not always expect the best of the reproduction for proceedings but someone had spent a lot of time and money trying to make this book outstanding and the printer for some reason failed to meet the standards I bet the editors expected. So it goes!