



Viscosity of Natural Gas at High-Pressure and High-Temperature

By Ehsan Davani

SPS Feb 2014, 2014. Taschenbuch. Book Condition: Neu. 220x150x9 mm. This item is printed on demand - Print on Demand Neuware - High-pressure and high-temperature (HPHT) gas reservoirs are defined as reservoir having pressures greater than 10,000 psia and temperatures over 300°F. Modeling the performance of these unconventional reservoirs requires understanding of gas behavior at elevated pressure and temperature. An important fluid property is gas viscosity which is a key factor in modeling of gas mobility in the reservoir that can have a significant impact on reserves estimation during field development planning. Accurate measurements of gas viscosity at HPHT conditions are both extremely difficult and expensive. Thus, this fluid property is typically estimated from published correlations that are based on laboratory data. This book reviews the databases of hydrocarbon gas viscosity that are available in the public domain, and discusses the validity of published gas viscosity correlations based on their applicability range. Then the full process of measuring the gas viscosity at HPHT is well explained. Step by step developing an HPHT gas viscosity correlation and running a sensitivity analysis on the accuracy of the most well-known gas viscosity models at HPHT is discussed as well. 148 pp. Englisch.



Reviews

Extensive guide! Its such a excellent read. This can be for anyone who statte that there was not a worth looking at. I am just effortlessly will get a satisfaction of looking at a written publication.

-- Melvin Hettinger

This book will not be effortless to start on reading through but very exciting to learn. It is amongst the most remarkable book i have got go through. Once you begin to read the book, it is extremely difficult to leave it before concluding.

-- Dr. Easton Collier DVM