

ERRATUM

Theory of Earthquakes, II – Inclusion Theory of Crustal Earthquakes, Vol. 113, 1975.

Page 160, 4th Paragraph

Replace $\sigma_t + P_p$ by $\sigma_t + \delta P_p$, where δP_p is the pore pressure increase within the inclusion zone that results from crack closure in the focal region.

BOOK REVIEWS

Applied Geophysics – Introduction to Geophysical Prospecting by GERHARD DOHR. Translated from German by George H. Kirby, Vol. 1 of 'Geology of Petroleum' (Editor: Heinz Beckmann), Ferdinand Enke Publishers, Stuttgart 1974. 272 pages, 125 figures, price DM 16.80.

This book is the first volume of a new series 'Geology of Petroleum', edited by Heinz Beckmann. It is an attempt to present applied geophysics with a focus on methods for oil prospecting, especially on modern seismic methods. Such a book is needed since, as far as I know, no presentation is available which gives an up-to-date and unifying overview. Therefore, this book, written by a representative of the prospecting industry, could really close a gap. However, its shortcomings are so serious, both in form and content, that it is of little use only.

The German manuscript has been translated into English by a translator who apparently has no knowledge of geophysics and this has gone unnoticed by author and editor. Many technical terms have been translated literally, resulting in unusual and sometimes misleading expressions. Geophysicists will generally find out what the author wants to say. However, students and scientists from neighbouring disciplines will certainly have difficulties, and it is for them that the book has been mainly written, according to the preface. An example from p. 13 which stands for many others: 'direction of dispersion' is used where direction of propagation (of a seismic surface wave) is meant. Another formal point is the great number of misprints. The book is inexpensive, but did it have to be produced that carelessly?

The content is also presented poorly. The physical basis of the different prospecting methods is rarely explained properly. There also a number of errors, for instance on p. 207 where the torque exerted on a magnet by a homogeneous magnetic field is called a force. The main part of the book is devoted to modern seismic methods with emphasis on digital techniques. This part is, in my opinion, of some value only for readers who already have a background in the field. The author tries to avoid mathematics completely and instead explains everything verbosely. With this style, important terms and concepts of digital seismics have to be set in quotation marks, for instance "deconvolution" (p. 137), "migration" (p. 142), "true amplitude recovery" (p. 127): they remain at the level of prospecting industry advertisements. In such a book, this means failure in an essential point. However, it must be doubted that it is possible at all to explain digital seismics without a basis of mathematics. What is really needed at present is an introduction to this subject which