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### Software streamlines subsurface oil and gas exploration

Technical and commercial decision making processes for oil and gas exploration and production operations can be improved with the aid of extra information and much faster interpretation of data provided by the time-saving geological/geophysical software packages from a British company.

The RokDoc<sup>®</sup> and FaultX<sup>®</sup> packages from Ikon Science speed up the subsurface interpretive process – from prediction and modelling through detection and search into evaluation methods – to form the basis for investment and decision support systems.

RokDoc<sup>®</sup> software enables oil and gas companies to make better decisions by investigating and predicting the seismic properties of rocks. Users are able to predict how the presence of hydrocarbons would appear in three-dimensional seismic data and, using RokDoc's "Scenario" element, can creatively model new exploration ideas and reservoir production schemes such as time lapse (four-dimensional) seismic.

Features of RokDoc<sup>®</sup> include MC-PPP (MonteCarlo pore pressure prediction), which is used to predict sub-surface pressure from well and seismic velocity data. The software can be "borrowed" from the system to allow users to work in data rooms, on site or at home.

FaultX<sup>®</sup> saves labour and enhances project economics by rapidly identifying and creating fault planes from seismic data to allow structural and reservoir modelling and optimal well planning.

As well as being up to ten times faster than current time-consuming and repetitive systems for finding, picking and interpreting faults, FaultX<sup>®</sup> also helps interpreters to find important faults that can be missed with conventional methods. FaultX<sup>®</sup> can be integrated into existing interpretation systems to maximise ease of use and productivity while minimising costs and the need for training.

Ikon Science also provides the unique and highly acclaimed training course 'The Essentials of Rock Physics for Seismic Amplitude Interpretation'. Presented as both an in-house and public course, over 200 professionals have attended the course in 2003 alone.