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Daniel J. Tearpock¹, James C. Brenneke¹ (1) SCA, Houston, TX

Shared Earth Modeling: A True Multidisciplinary Approach to E&P

In order to develop an accurate shared earth model for exploration or development projects, companies need to apply a proven exploration/development philosophy centered around true synergistic multidiciplinary teams using advanced integrated interpretation software and project workflows. The technical philosophy and methods used by a team is an important factor in success. Decades of observation and analysis indicate that one of the primary reasons some individuals, teams or companies are more successful than others is the direct result of the technical philosophy and methods used. The many problems being addressed by the petroleum industry that require specialized knowledge about too many subjects to be adequately addressed by an individual has led to the creation of multidiciplinary teams. A shared earth model incorporates data from all disciplines in real-time. Recent developments in software integration are beginning to allow the use of a single database to store and use for real-time geological, geophysical and engineering activities. This database is, in effect, the beginnings of a shared earth model. The methods used are integrated into the software and team activities through specific project workflows designed to meet the objectives and goals of each project. Through the development and application of a shared earth model, using advanced software and a synergistic approach, teams: 1) generate viable, high quality, three dimensionally valid subsurface interpretations and prospects, 2) reduce cycle time, 3) increase the effectiveness of the integrated process and 4) find oil and gas thereby adding value to the bottom-line of an exploration or development program.