عنوان مقاله:

Evaluation of Faults Reactivation Tenacity in One of the Low-Pressure SW Iranian Carbonate Reservoirs: An IOR Viewpoint

محل انتشار:

مجله علوم و فن آوری نفت, دوره 10, شماره 1 (سال: 1399)

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خلاصه مقاله:

In case of a decrease in reservoir pressure, injection projects are inevitable that the desired production rate is maintained. Moreover, one of the key issues in injection operations is optimum injection pressure determination to prevent fault reactivation . The aim of this study is to evaluate fault reactivation tenacity in one of SW Iranian oil fields at different injection stages. Two main steps in this study are geomechanical modeling and fault extraction. In addition, fullset data, image log, dipole sonic log, and MDT pressure points were used to construct the geomechanical model. Also, ۳-D seismic data were used for fault extraction and characterization. Ultimately, according to the geomechanical model, the stress state is strike-slip normal, and the maximum horizontal stress direction is toward NE-SW. Furthermore, ۱۸ faults have been extracted using seismic data, which their strikes are often NW-SE. In addition, the faults are inactive in the present-day stress state, but the first fault will be reactivated with a ۳۳ MPa increase in pore pressure.

کلمات کلیدی:

Fault Reactivation, Geomechanical modeling, Pore Pressure, Sarvak Formation