

Sulaiman fold belt Pakistan: Structural styles, reserves, prospects and potential

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Abstract

Fold-and-thrust belts throughout the world serve as prospective and productive areas for hydrocarbon exploration and extraction. Sulaiman fold belt extending over 200,000 km² is recognized as most prolific hydrocarbon province of Pakistan. It is located near the Zagros fold belt which contains 49 % of global hydrocarbon reserves in fold-and-thrust belts. The Sulaiman fold belt is estimated to have about 2852 mm boe of gas reserves as compared to about 80,330 mm boe of Zagros fold belt and Reforma fold belt which is most prolific after the Zagros. Sulaiman fold belt possess sedimentary strata with stratigraphic thickness more than 7 km located over transitional crust making it more prolific and prospective area for hydrocarbon exploration. It has all necessary element and critical process to make a complete composite petroleum system at different level. Multiple source and reservoir rocks are present with considerable thickness increasing from east to west. Recent concession map of Sulaiman fold belt shows that the entire area has been awarded to different national and international exploration companies. This research work is an assessment and review of structural style of majors gas fields supported with seismic data and other cross sectional studies, statistical analysis, reserves, prospects and potential of hydrocarbon in Sulaiman Fold Belt. This research will help in understanding the structures, reserves, prospects of major Gas field and hydrocarbon potential of the SFB. Similar work has been carried by Jadoon et al. (2015) on Salt Range and Potwar Plateau. This research work is an extension of their work up to SFB.