

## **Hydrocarbon Prospects of Baran Anticlinal Trend, Nw Pakistan.**

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Baran Anticlinal Trend is a prominent structural high at the boundary between northern Suleiman Range and Bannu Trough in NW Pakistan. Current field investigations reveal that it is about twenty five kilometers long, running NNE-SSW, is a well-defined, anticlinal trend cored by Ghazij-Panoba shale of Eocene age. Towards west the Baran Anticlinal Trend is marked by a prominent structural low namely the Zara Mela Syncline, cored by the Molasse sediments whereas its eastern low is provided by the Bannu Trough. The attitude data on the limbs of Baran Anticlinal Trend suggest that it is asymmetric to the east and is part of an east verging structural system.

Dip transects constructed across the trend suggest the presence of viable structural trap at the level of Mesozoic rocks that is supported by seismic data as well. Various oil and gas discoveries in the adjacent area indicate that the Baran Anticlinal Trend lies within the oil-gas province and, since it is bounded by well-marked structural lows, it would be expected that any petroleum would have migrated up the likely reservoirs beneath this trend. The reservoir rocks include Paleocene Lockhart/Hangu Formation, Cretaceous Pab Sand Stone/Lumshiwai Formation and Jurassic Samana Suk and Datta formations which are the main producing horizons of the oil-gas fields in adjoining areas.