

**STRUCTURAL INTERPRETATION, STRUCTURAL
BALANCING AND RESTORATION OF BADIN AREA,
LOWER INDUS BASIN, PAKISTAN**



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ABSTRACT

This particular investigation is carried out to investigate structural style through, seismic structural interpretation of Badin area, Lower Indus Basin. Directorate General of Petroleum Concession (DGPC) provided 2D seismic reflection data required for conducting this research. Structural analysis showed the deformation trend varying in time and trapping mechanism that has been proven productive. Leads other than the potential zones were also marked. All the faults have originated from Chiltan limestone. The younger faults in assistance have helped making Horst-type structural traps. As the data quality was poor some of the faults could not be marked to the depth of Chiltan limestone. Four horizons are marked, all the faults are originating from Chiltan and ending below or at Khadro because Khadro is basaltic. These two reflectors have been marked to understand the structural geometry. Top Lower Goru is reservoir in this area so it is also marked to understand the already producing well's geometry. I also attempted to validate the structure present in this area and it was found that the structure can be undeformed and it provided useful insights about the earlier stages of geological developments in Badin area. Crustal thinning is also present in the area due to extensional forces which cause the crust to elongate.

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