

**RESERVOIR CHARACTERIZATION OF SAFED KOH
ANTICLINORIUM CENTRAL BASIN, PAKISTAN**



A thesis submitted to Bahria University, Islamabad in partial fulfillment
of the requirement for the degree of MS in Geology

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Certificate

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CERTIFICATE OF ORIGINALITY

This is to certify that the intellectual contents of the thesis

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ABSTRACT

The Safed Koh fold belt is the eastern most line of folding, comprised of four anticlinal culminations which are known as Dhodak, Rodho, Afiband and Zindapir anticlines. Zindapir Anticline is southern most and the largest culmination of the Safed Koh line of folding. Petrophysical analysis of Dhodak-05, Dhodak Deep-01 and Zindapir-01 using the well logs were carried out in order to mark the zone of interest i.e. the reservoir zone, followed by the calculating the volume of shale, sonic, density and neutron porosity, and resistivity of the water of the formation. Three zones of Dhodak Deep-01 are marked. Two were having good potential while one is very tight. Five zones of Dhodak-05 are marked all bear good potential while Zindapir-01 have no good potential due to shallow depth of Pab sandstone and Ranikot. Isopach maps are made by using thickness of different formations encountered in Dhodak Deep-01, Dhodak-05, Afiband-01, Rodho-01, Dewan-05, Dewan-03 and Zindapir-01. Isopach at Dunghan levels shows that Dunghan Formation is exposed at the surface where the thickness of Upper Ranikot, Lower Ranikot, Pab, Mughal Kot and Parh limestone increases in south wards direction.

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