

**CRETACEOUS AND JURASSIC RESERVOIR
EVALUATION OF NANDPUR AND PANJPIR GAS
FIELD, CENTRAL INDUS BASIN, PAKISTAN**



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ABSTRACT

The main objective of the research is to evaluate the hydrocarbon potential of the Nandpur and Panjpir gas field. Nandpur and Panjpir gas fields are located in the Punjab Platform, District Multan in Punjab province of Pakistan. In Nandpur gas Field Lumshiwai, Samanasuk and Shinawari Formations are acting as a potential reservoir. In Panjpir gas field Samansuk Formation is acting as potential reservoir.

In the present study hydrocarbon potential of Nandpur and Panjpir gas fields has been interpreted by evaluating the well logs of one exploratory well (Panjpir-01) and two development wells (Panjpir-05 and Nandpur-02) in terms of reservoir evaluation. Nandpur and Panjpir gas fields has been evaluated on the basis of well logs. In this research study the well data of Nandpur 02, Panjpir 01 and Panjpir 05 (located in Central Indus Basin) was acquired from Land Mark Resources (LMKR), Pakistan with prior permission from Directorate General of Petroleum Concession (DGPC). Sonic Log, Neutron Log, Density Log, Gamma ray Log, SP and Resistivity Logs were analyzed for petrophysical analysis. The petrophysical properties which have been determined include shale volume, effective porosity, saturation of water and hydrocarbon.

On the basis of the stratigraphic correlation better quality reservoirs are expected in the southern portion because thickness is increasing towards south. In this correlation Lumshiwai and Shinawari Reservoirs are increasing towards south while Samanasuk is showing same thickness. On the basis of all these delineated petrophysical parameters it has been determined that Nandpur and Panjpir Fields has great potential to produce viable hydrocarbons.

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