

**PETROPHYSICAL ANALYSIS OF DAKHNI-06 WELL,
NORTHERN POTWAR BASIN, PAKISTAN.**



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

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ABSTRACT

The main purpose of the study is to evaluate hydrocarbon potential of the Dakhni well-06, Upper Indus Basin, Pakistan. This has been completed by using complete suite of wire line logs and available well data. The whole set of data is issued by Land Mark Resources, Pakistan with the prior permission of Directorate General of Petroleum Concessions, Pakistan. To complete the above mentioned taskw all logs are used. These Formations were evaluated for the hydrocarbon potential in detail using set of equations. From this analysis, this has been interpreted that Sakesar formation is acting as reservoirs in the wells. The methodology adopted to achieve this task includes; the measurements for the Shale volume by using Gamma Ray Log, Porosities by Density & Neutron Log, Resistivity of water by using R_w method, Saturation of water in the zone of reservoir and Hydrocarbon saturation using Archie equation. The results for the thesis are then displayed in the form of excel sheets and graphs for the better approach towards the task. These all displayed results show that the dakhni wells are mostly hydrocarbons and water bearing and sakesar limestone in well-06 producing reservoirs for hydrocarbons.

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