

**RESERVOIR CHARACTERIZATION OF UPPER SANDS
OF LOWER GORU FORMATION, USING WELL DATA,
BADIN AREA, LOWER INDUS BASIN, PAKISTAN**



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ABSTRACT

The main purpose of the study was to characterize the Upper Sands of Lower Goru Formation, Badin Area and Lower Indus Basin, Pakistan. This was achieved by using complete suite of wire line logs and available well data. This complete set of data was issued by LandMark Resources, Pakistan in the digital form, with the prior permission of Directorate General of Petroleum Concessions, Pakistan. To complete the above mentioned task, the LAS files and the well tops were loaded into the Geographix software and then correlated to mark the horizon of interest i.e. reservoir zone. Then isopach maps of Upper Goru and Lower Goru formations were prepared. After that the Upper Sand of Lower Goru Formation was manually correlated. The reservoir zones were evaluated for the hydrocarbon potential in detail using the software, set of equations and different formation evaluation charts made by Schlumberger. The methodology adopted to accomplish this task include; the measurements for the shale volume by using gamma ray log, porosities of the reservoir zone by density, sonic and neutron log, resistivity of water by using spontaneous potential log, saturation of water in the zone of reservoir and the net pay of the reservoir zones. The results for the dissertation were then displayed in the form of excel sheets and graphics for the better approach towards the task.

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