Petrophysical analysis of wells Zaur-01 and Zaur-03, southern Indus basin, Pakistan



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ETROPHYSICAL ANALYSIS OF WELLS ZAUR-01 AND ZAUR-03, SOUTHERN INDUS BASIN, PAKISTAN



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ABSTRACT

The main purpose of this work is to evaluate the hydrocarbon potential of wells Zaur-01 and Zaur-03. Geographically Zaur-01 and Zaur-03 wells are located between latitude 24° 25′ 60″ N and from longitude 68° 69′ 45″ E, Badin block, Southern Indus basin. Southern Indus basin is located just south of Sukkur Rift which divides Central and Southern Indus. Tectonically Southern Indus basin is bounded by the Indian shield to the east and the marginal zone of Indian plate to the west. Its southward extension is confined by offshore Murray Ridge.Rocks from Triassic to Pleistocene age are present in this area. To evaluate the potential of the reservoirs physical properties were calculated and analyzed using different logs like Sp-log, Gamma ray log, Neutron log, Density log and Resistivity logs. One zone of interest was marked in Zaur-01 from 5960 to 6060 feet. Three zones were marked in Zaur-03, ranges from 6270 to 6300 feet, 6360 to 6410 feet and 6640 to 6665 feet, respectively. Out of three zones in Zaur-03, zone 2 is the best productive zone because of its more thickness, average porosity and hydrocarbon potential.

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