EVALUATION OF PETROLEUM POTENTIAL OF CHANDA DEEP-01 WELL, KHYBER PAKHTUNKHAWA PAKISTAN

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ABSTRACT

This research work is carried out to evaluate the petrophyscial analysis of Chanda Deep-01 well. Geographically, the study area is located in district Shakardarra, Khyber Pakhtunkhawa, Pakistan. Tectonically the area lies in compressional regime. Chanda Deep-01 well has been drilled upto Wargal Limestone of Permian age. Two potential zones have marked in clastic reservoirs of Chanda-Deep-01 well. Two zones have been marked in Datta Formation. First zone of interest is starting from 4651m and having total thickness of 7m, while the second zone lies at the depth of 4709m with thickness of 10m. All the basic logs were run at the level of both reservoirs. First zone of Datta Formation exhibits 26.54% volume of shale, 8% effective porosity and 55.78% hydrocarbon saturation. Second zone of Datta Formation exhibits 27.27% volume of shale, 3% effective porosity and 54.29% hydrocarbon saturation.

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ABBREVATIONS

OGDCL	Oil and Gas Development Company Limited
LMKR	Landmark Resources
DGPC	Directorate General of Petroleum Concession
PEF	Photo-Electric Factor
LLS	Shallow Lateral Log
LLD	Deep Lateral Log
MSFL	Micro-Spherically Focused Log
SP	Spontaneous Potential
B.H.T	Bottom Hole Temperature
Vsh	Volume of Shale
GR log	Gamma Ray Log
GR min	Gamma Ray minimum
GR max	Gamma Ray maximum
ρma	Density of Matrix
ρf	Density of Fluid
Sh	Saturation of Hydrocarbons
Sw	Saturation of Water
Rmfeq	Resisitivity of Mud Filtrate Equivalent