
REMAINING HYDROCARBON POTENTIAL IN PAKISTAN A STATISTICAL REVIEW

Farrukh Daud, Gulzeb Nabi Khan, Muhammad Ibrahim

OMV Pakistan (Exploration) GmbH, Islamabad

ABSTRACT

The objective of any exploratory campaign in a geologic province with known accumulations of oil and gas is to determine where to drill, given the expected number and size of the accumulations present. The current analysis presented here is to suggest the future exploration strategies, for the E & P industry in Pakistan, focusing the areas with significant upside potential. This analysis is purely statistical however basin styles were also considered during the study. The study utilizes the drilling data of around ~ seven hundred and seventy five wells and field sizes from all over Pakistan up till 2010.

This analysis focuses on the Indus Basin and does not cover Baluchistan, Makran and Offshore. As a part of this work, field size distribution charts and creaming curves for individual basins were generated which were further utilized in the evaluation of yet-to-find reserves for individual basins and plays. The results of the present assessment, suggest that the major play of Cretaceous clastics still presents substantial additional potential in the Middle Indus Basin as well as in the Kohat / Potowar oil province. Similarly the Tertiary carbonate play in the Sulaiman Foldbelt and the Kohat / Potowar cannot yet be considered as mature exploratory play. The Jurassic carbonates are considered as an evolving play in the Sulaiman Foldbelt which requires extensive exploration and development.

A thorough analysis of the data also highlights the fact that so far there is no clear strategy being applied by the industry. Any subsequent discovery in an area catches the limelight and the rest of the plays lose attention. The potential highlighted in this study might improve the understanding of the E&P companies, and they can select the areas of interest based upon the level of investment and technological requirements and the expected potential meeting their threshold.