

A Regional Overview of the Exploration Potential of the Middle East

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The Middle East is the world's most prolific petroleum province and contains 5 of the 6 largest oil producing countries. Namely Saudi Arabia, Iran, Iraq, Kuwait and the U.A.E. This success is largely due to the stacked nature of what are essentially very simple petroleum systems with multiple carbonate platform and deltaic reservoirs, regional evaporitic seals, world class source rocks and the overprint of very large compressional anticlines.

BP's unique database gathered during some 100 years of exploration activity in the region has been used to generate a plate scale understanding of the geological evolution of the Middle East and an evaluation of the regional resource potential of the region. A detailed tectonostratigraphic history of the plate is used to define a total of 6 play fairways ranging in age from Late Palaeozoic to Tertiary, which are analysed for their petroleum potential.

All major fields are seen to be related to: i) compressional folding either as thin skinned Zagros folds or as thick skinned inversions of older Infra-Cambrian (north-south) and Permian-Triassic (northwest-southeast) rifts ii) salt cored anticlines

The areal distribution of the various play types is determined by the interplay of regional facies and burial trends. These are discussed using a series of detailed palaeo facies and depth maps. Finally, we comment briefly on the remaining exploration potential in the region from a play fairway point of view.