

**STRUCTURAL ANALYSIS OF MAKRAN
ACCRETIONARY PRISM**

MS Thesis



By

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ABSTRACT

The study area Makran Accretionary Prism located in the northwestern part of Indian Ocean in the South of Iran and Pakistan. The data, which is taken for the study, is of Makran Block. Data is provided by Pakistan Petroleum Limited. 2D seismic data of this area is limited and not able to provide detailed information regarding the internal structure of the area therefore the 3D data is taken. The Makran Block 3D seismic data comprises of 2084 km² of area.

In this study, the structural settings of the Makran Accretionary Prism have been studied through the 3D seismic data of Makran Block. The data is very complex as the area is highly compressive. Major part of the data is chaotic and not clearly visible. Some reflections have been picked from the visible part of data. Faults have been marked too in the sections.

Faults presented in the most of the area are imbricate thrust faults, which are overlaid by some overturned folds making the fault bend fold structures. These can be seen between 2500 ms to 4500 ms in the sections.

Gas chimneys are also visible in the data, which indicates the presence of hydrocarbons. Bright spots on the seismic lines have been marked and can be used as evidence for hydrocarbon potential.

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