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**FAULT-PLANE ANALYSIS IN SEAL STUDIES**  
**GOURARA AND OUED NAMOUS CASE STUDY**

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Most structural traps encountered in Sahara platform have closures against faults. The demigration phenomena can occur, and the seal studies is necessary. The data base used for this study are mainly well data, seismic section and structural maps.

Apart from the capillary pressure, generally the hydrocarbons migration is through geological layers instead of along faults.

The approach consisted of an analysis of the reservoir structure maps to establish the column height between the crest and lowest closing contour, and then mapping the fault plane to determine the juxtaposition of permeable beds and shale seals, using the stratigraphic column of the nearest well to the considered structure.

The obtained results are illustrated in cross sections and allow to approach more easily the fluid-tightness of the fault (sealing effect), the oil and gas migration pathways, and to predict the potential reservoirs units.