

**2D SEISMIC DATA INTERPRETATION AND RESERVE ESTIMATION OF  
SAWAN AREA ,SINDH PAKISTAN**



Submitted by

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## **ABSTRACT**

Migrated seismic lines PSM98-206, PSM98-20 and PSM98-215 were obtained from LMKR after prior permission from Directorate General of Petroleum Concessions (DGPC) for the purpose of seismic interpretation and well log analysis of Sawan-07. Dip lines are oriented E-W and while Strike line is oriented N-S. The required information for the seismic interpretation was provided with the seismic section.

Five horizons were marked which were probably Top SML, probably Top Lower Goru, probably Top C Sand, probably Top B Sand and probably Top Chiltan Limestone. Major faults were identified, which extended through the formations. TWT and Velocity contour maps were generated for these above mentioned horizons. Depth contour maps were generated with the help of these contour maps which delineate the subsurface structures and tectonic activities which took place throughout geologic past.

Well log analysis was carried out on Sawan-07 to identify the reservoir area and evaluate the values for Saturation of water, Volume of shale, Porosities present in the subsurface formation. On the basic of this analysis we discover one probable hydrocarbon zone in C sand.

Potential hydrocarbon reserves were estimated using the effective porosity, areal extension of the reservoir, and net pay thickness of the reservoir, for the plausible economic recovery evaluation from the calculated reserves.

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## DEDICATION

THIS DISSERTATION IS DEDICATED TO OUR PARENTS AND ALL THOSE WHO ARE SINCERE TO THIS FLAG, WITHOUT THEIR SUPPORT WE WOULDN'T HAVE GONE THIS FAR.

*Breathes there the man with soul so dead, who never to himself hath said, this is my own, native land. Walther Scott*

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