

**2D SEISMIC INTERPRETATION, PETROPHYSICAL  
AND ROCK PHYSICAL ANALYSIS OF SANGHAR  
AREA, WELL CHAK-63#01, LOWER INDUS BASIN,  
PAKISTAN.**



**By**

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**2012**

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A thesis submitted to Bahria University, Islamabad in partial fulfillment  
of the requirement for the degree of B.S in Geophysics

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## **DEDICATION**

This whole dissertation is dedicated to our parents for what we are today is only because of their endless love, continuous support and prayers throughout our lives....

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## **ABSTRACT**

This dissertation contains the study and interpretation of 2D seismic reflection data of selected seismic lines of Sinjhora area, Lower Indus Basin, Pakistan. The main objective of this research was delineation of subsurface structures favorable for hydrocarbon accumulation. This area is situated in the Sanghar District of Sindh Province and is licensed to Oil and Gas Development Corporation Limited (OGDCL). The seismic data for this dissertation was provided by the Land Mark Resources (LMKR) by the permission of Directorate General of Petroleum Concessions (DGPC). The data comprised four seismic lines, base map and well tops of well CHAK-63#01. The names of lines obtained are: (876-SGR-86, 886-SGR-346, 886-SGR-347, 886-SGR-350 and 896-SGR-389)

Three prominent reflectors (pink, green, blue) were marked on the basis of their reflection character. They represent Ranikot, Upper Goru and Lower Goru Formation respectively. Two-way time (TWT) was read from the seismic sections and average velocities were used to create TWT and Depth Contour maps.

Rock physical studies followed by petrophysical studies were done for Lower Goru Formation which proved it to be the reservoir formation in the well CHAK-63#01.

## **ACKNOWLEDGEMNT**

We are especially indebted to our dissertation supervisor Mr. Muyassar Hussain (LMKR) for giving us an initiative to this study and his inspiring guidance, dynamic supervision and constructive criticism helped us to complete this work in time. We are also obliged to our internal supervisor Miss. Urooj Shakir for her help and guidance during the completion of this dissertation.

We would like to thank our all teachers especially head of department Dr. Zafar for his valuable knowledge, assistance, cooperation, kind attention and guidance throughout the completion of our degree.