2-D INTERPREATATION AND PETROPHYSICALANALYSIS OF JOYA MAIR AREA, UPPER INDUS BASIN, PAKISTAN

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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

Dedicated to our Parents for their everlasting support and fulfilling all our wishes.

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ABSTRACT

The purpose of this dissertation is to understand the various steps involved in seismic reflection interpretation. To carry out this exercise, seismic reflection data, which consists of seismic sections, was provided by Directorate General of Petroleum Concessions Government of Pakistan (DGPC) on the request of Head of department of Earth & Environment Sciences Bahria University Islamabad.

The study was carried out to understand the subsurface structural trend and stratigraphy of the area. Seismic interpretation resulted in time and depth contour map, which helps to understand the subsurface structure for further exploration. Fault seal analysis is done by using Allen diagram to determine the capability of the structure to act as a reservoir, and to reveal the juxtaposition of structure providing a clearer image of subsurface. Geoseismic section helped us in correlation of seismic to well data. The research also helped in estimation of petro physical properties to observe hydrocarbon potential of the formation

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