

**2-D SEISMIC DATA INTERPRETATION OF
BUZDAR BLOCK, DISTRICT TANDO
ALLAHYAR, SOUTHERN INDUS BASIN,
PAKISTAN**



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Abstract

Generally our aim was to understand the tectonics and geology of the Buzdar block along with the interpretation procedure of migrated seismic sections to check out the subsurface structures that may be a possible lead for hydrocarbons. As the area is an extensional regime so we have to mark the faults according to their type and structure they are making. We have to mark the formations by checking the Vertical Seismic Profile (VSP) data. In this study, we did the interpretation of the migrated seismic lines of the 872-SGR-527, 872- SGR -529, 872- SGR -531, 872- SGR -532 of Buzdar block ,District Tando Allahyar, Sindh. This data was obtained from Land Mark Resources (LMKR) by the permission of Directorate General of Petroleum Concession (DGPC) Islamabad. The lines 872- SGR -529, 872- SGR -531, 872- SGR -532 were oriented W-E whereas the line 872-SGR-527 was oriented NW-SE. The information we require was given in the time section which was helpful in the conversion of time into depth. These calculations helped us in subsurface interpretation of the area, which was the basic purpose of this project. Three reflectors were marked named top Khadro Formation, top lower Goru formation and top Chiltan limestone (probable). Faults were marked and then time contour maps were generated, after that, time was converted into depth with the help of well velocity from VSP data for lower Goru formation and average velocity for Chiltan limestone (probable) from regression analysis and, finally, depth contour maps were generated which helped us to know the basic mechanism of tectonic movement in the area.

Acknowledgement

The great help, assistance, sympathies and prayers of many individuals helped us in completion of this work. We are grateful to our external supervisor Mr. Ghulam Shabbir Mughal (Senior Geophysicist, Saif Energy Pvt. Ltd Islamabad) who provided his support, guidance and useful advises during our project. We are also thankful from the depth of our heart to our internal supervisor Mr. Anwar Qadir (Assistant Professor, Department of Earth and Environmental Sciences, Bahria University, Islamabad) for his dynamic supervision and motivation during our project and critical review of our thesis that shifted the whole paradigm of the project which gave a new life to the project and helped us complete this work in time. The sympathetic support, whole hearted cooperation and advises given by Mr. Aamir Malik (Assistant Professor, Department of Earth and Environmental Sciences, Bahria University, Islamabad) are also not forgettable that encouraged us in doing our thesis with devotion.

Dr. Muhammad Mujtaba (Chief Geologist (retired), Hydrocarbon Development Institute of Pakistan, Islamabad), Dr. Taseen Ullah Khan (Professor, Department of Earth and Environmental Sciences, Bahria University, Islamabad) and Mr. Omer Manzoor (Principal Geophysicist, Dewan Petroleum, Islamabad) are also thanked for providing their precious time for verbal discussions during our project. We would also like to thanks our Head of Department Dr. Muhammad Zafar for providing the support necessary during our work. We are also thankful to Mr. Hummad Ghani (Lecturer, Department of Earth and Environmental Sciences, Bahria University, Islamabad) for providing information needed during our wok.

We are also extremely thankful to our batchmates Aamir Ashfaque Buriro, Muhammad Bilal Paul, Muhammad Harris Haleem, Muhammad Abid, Usama Mehmood, Aatef Badshah, Saad Bin Sarfaraz, Zaheer Ud Din Babar and our senior Muhammad Mudassir who supported us during our work and stood by our side during the whole course.

Dedication

“To our parents and teachers who have been continuous source of inspiration for us, otherwise we would not have the goals we have to strive and be the best to reach our dreams”.

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