

**INFRACAMBRIAN PROSPECTS EVALUATION OF FORT-
ABBAS AREA, PUNJAB PLATFORM, MIDDLE INDUS
BASIN, PAKISTAN**



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ABSTRACT

The main objective is to evaluate prospect for infracambrian in Fort Abbas area. Migrated seismic lines 944-FABS-39, 944-FABS-40, 944-FABS-41, 944-FABS-44, 931-FABS-11, of Fort Abbas area Punjab Platform were obtained from Directorate General of Petroleum Concessions (DGPC) for seismic interpretation and Well Logs of well Bijnot-01 were obtained for petrophysical evaluation. Most seismic lines are oriented NW-SE of the Central Indus basin except for the seismic line 931-FABS-11 & 94-FABS-44 which is oriented NE-SW. The information we required was given within the time section, which was helpful in the conversion of the time section into depth section. These calculations helped in subsurface interpretation of the area, which was the basic purpose of this project four reflectors were marked with Top Samanasuk, Top Cambrian, Top Infracambrian, and Top Basement formation. Fault was marked, and then time contour maps were generated. After that time sections were converted into depth sections with the help of average velocity and finally depth contour maps were generated, this helped to know the basic mechanism of the tectonic movement in the area. The major cause has been the Normal Fault in the area that evoked from the basement rock and form horst and graben structure. Hydrocarbon traps were most possibly developed in the Horst & graben structure and are the prospective zones for hydrocarbon accumulation of the Fort Abbas area.

Petrophysical evaluation of well Bijnot-01 was carried out to highlight the reservoir area which included the selection of zone of interest followed by Log interpretation. The volume of shale, porosity was interpreted. On the basis of Petrophysical Evaluation it was noted that clastic reservoir Jodhpur sandstone have good shows of heavy oil and the reservoir of Cambrian (Khehra Sandstone) bore good porosity and have good shows of oil but the problem was the placement of well from where well cannot flow with economic value. The source rock distribution problem also exists in the area, so all these conditions make the well very uneconomical so it was abandoned.

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CONTENTS

	Page
ABSTRACT	i
ACKNOWLEDGEMENTS	ii
FIGURES	vi
TABLES	ix

CHAPTER 1 INTRODUCTION

1.1	Introduction to the area	1
1.2	Objectives	1
1.3	Methodology	2
1.4	Available data	3
1.5	Base map	4

CHAPTER 2 TECTONICS AND STRATIGRAPHY

2.1	Introduction	6
2.2	Tectonics	6
2.2.1	Punjab platform	7
2.3	Stratigraphy	11
2.3.1	Post Eocene formations	13
2.3.2	Eocene formations	13
2.3.3	Paleocene formations	15
2.3.4	Cretaceous formations	15
2.3.5	Jurassic formations	16
2.3.6	Permian formations	17
2.3.7	Cambrian formations	17
2.3.8	Pre-Cambrian formations	18
2.3.9	Archean formations	19

CHAPTER 3 PETROLEUM GEOLOGY

3.1	Hydrocarbon potential	20
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3.2	Petroleum system	20
3.2.1	Source rock	20
3.2.2	Reservoir rocks	21
3.2.3	Seal rocks	21
3.2.4	Trapping mechanism	21
3.2.5	Geothermal gradient and source rock maturity	21
3.2.6	Oil and gas shows	22

CHAPTER 4

SEISMIC INTERPRETATION

4.1	Introduction	23
4.2	Identification of reflectors	24
4.3	Jump correlation of seismic sections	24
4.4	Methods to the interpretation of seismic section	25
4.5	Data set used in the interpretation	25
4.5	Interpretation of seismic lines of the study area	25
4.6.1	Interpretation of line 931-FABS- 33	25
4.6.2	Interpretation of line 931-FABS-16-A	27
4.7	Time and depth contour maps	33

CHAPTER 5

POSTMORTEM STUDY USING WELL DATA

5.1	Introduction	41
5.1.1	Introduction to well fort abbas 01/ Bijnot -01	41
5.2	Wells correlation	42
5.3	Well logging	44
5.4	Petrophysical interpretation	45
5.5	Marking the zone of interest	45
5.6	Lithology interpretaion from wire line logging	46
5.7	Volume of shale (Vsh)	48
5.8	Porosity calculation	49
5.9	Neutron-Density crossplot	52
5.10	Resistivity of water (Rw)	53
5.11	Water saturation	55
5.12	Results of the petrophysical evaluation	58

CONCLUSIONS	59
RECOMMENDATIONS	60
REFERNCENSES	61
APPENDIX	

FIGURES

		Page
Figure 1.1.	Location map of the study area demarcated in box	1
Figure 1.2.	Work flow the proposed methodology.	2
Figure 1.3.	Base map showing the different seismic lines of Fort Abbas area and well locations.	4
Figure 1.4.	Base map showing the different seismic lines of Bijnot area and well locations.	5
Figure 2.1.	Location of Punjab Platform. It is surrounded by Sulaiman depression in the west, Sargodha high in North & India towards East.	8
Figure 2.2.	Location and tectonic set up of Punjab Platform.	9
Figure 2.3.	Gross thickness map of Infracambrian. Maximum thickness found near Marot-1, Bahawalpur East-1 & Fort Abbas-1. The oil well of Baghewala-1 is also marked.	11
Figure 2.4.	Generalized stratigraphy of Punjab platform and their lithological description.	14
Figure 2.5.	Well logs correlation of Punjab platform blocks (study area) using gamma ray and Sonic curves.	15
Figure 4.1.	Interpreted section showing the behavior of the reflectors of the seismic line 931-FABS-33. The basement reflector and Salt Range have a slight bulge.	26
Figure 4.2.	Interpreted section showing the behavior of the reflectors of the seismic line 931-FABS-16-A. The basement reflector has a slight bulge. But the younger reflectors have been uplifted and showing the anticlinal feature.	27
Figure 4.3.	Interpreted section showing the behavior of the reflectors of the seismic line 931-FABS-40.	28
Figure 4.4.	Interpreted section showing the behavior of the reflectors of the seismic line 931-FABS-37.	29
Figure 4.5.	Interpreted section showing the behavior of the reflectors of the seismic line 931-FABS-44.	30
Figure 4.6.	Interpreted section showing the behavior of the reflectors of the seismic line 931-FABS-11.	31
Figure 4.7.	Interpreted section showing the behavior of the reflectors of the seismic line 931-FABS-41.	32
Figure 4.8.	Interpreted section showing the behavior of the reflectors of the seismic line 931-FABS-15E.	33

Figure 4.9.	Time surface map of top of Infracambrian.	34
Figure 4.10.	Depth surface map of top of Infracambrian.	35
Figure 4.11.	Time surface map of top Jutana.	35
Figure 4.12.	Depth surface map of top of Jutana.	35
Figure 4.13.	Time surface map of top of Samanasuk.	36
Figure 4.14.	Depth surface map of top of Samanasuk.	36
Figure 4.15.	Time surface map of top of Datta.	37
Figure 4.16.	Depth surface map of top of Datta.	37
Figure 4.17.	Depth surface map of top of Basement.	38
Figure 4.18.	Time surface map of top of Basement	38
Figure 4.19.	Depth surface map of top of Salt Range.	39
Figure 4.20.	Time surface map of top of Salt Range.	40
Figure 5.1.	Structural Wells Correlation hang on Warcha Formation of Bijnot-01 & Fort Abbas-01.	43
Figure 5.2.	Structural Wells Correlation hang on Baghanwala Formation of Bijnot-01 & Fort Abbas-01.	43
Figure 5.3.	Structural Wells Correlation hang on Kussak Formation of Bijnot-01 & Fort Abbas-01	44
Figure 5.4.	Show Volume of Shale of Khewra Sandstone of well Fort Abbas-01(1070m-1400m)	49
Figure 5.5.	Show Porosity of Shale of Khewra Sandstone of well Fort Abbas-01(1070m-1400m)	52
Figure 5.6.	Crossplot of the Density and Neutron Porosity curves over Khewra Sandstone in the well Fort Abbas-01(1070m-1400m)	53
Figure 5.7.	Shale baselines are displayed as red on the adjacent RShal sh and RDeep sh of Khewra Sandstone of well Fort Abbas-01(1070m-1400m)	54
Figure 5.8.	Show water saturation of Khewra Sandstone of well Fort Abbas-01(1070m-1400m)	55

Figure 5.9.	Graph showing Vshale with depth of well Bijnot-01.	56
Figure 5.10.	Graph showing NTG vs Physical properties with depth of well Bijnot-01.	57
Figure 5.11.	Graph showing NPHI vs RHOB with depth of well Bijnot-01.	58

TABLE

	Page
Table 1.1. 2D Seismic Lines with their orientation for Fort Abbas area.	3
Table 1.2. 2D Seismic Lines with their orientation for Bijnot area.	3
Table 2.1. Summary of wells drilled in Punjab Platform.	10
Table 5.1. Showing Zones of interest	46
Table 5.2. Description of Porosity values.	49
Table 5.3. Net pay zone of Fort Abbas-01 and Bijnot-01.	58