

Smart Solutions for Today's Geoscientist



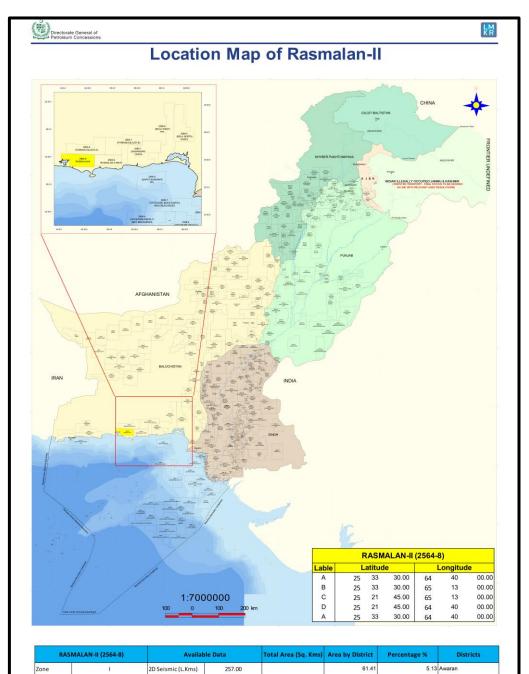
BLOCK: RASMALAN-II (2564-8)

ONSHORE BLOCK BIDDING ROUND 2025

MINISTRY OF ENERGY PETROLEUM DIVISION (DGPC)

Introduction

- Rasmalan-II Block covers an area of about 1196 sq km.
- Location: Gawadar and Awaran districts, Balochistan, Pakistan
- Geological Basin: Makran Basin Pakistan.
- The block falls in Prospectivity Zone I.
- Estimated Resources of the Balochistan:
 - Oil: 8,676 million barrels
 - Gas: 78 trillion cubic feet
- MARATHON and OGDCL acquired some 2D data approximately 257.5 L. Kms in the block within the years 1975 and 2016.
- The Block is surrounded by Parkini-II Block-A (North) and Rasmalan-II West (East) blocks.



1196.90

1,135.49

94.87 Gawadar

NA

NA

D Seismic (Sq.Km

No. Wells

Grid Area

rovince

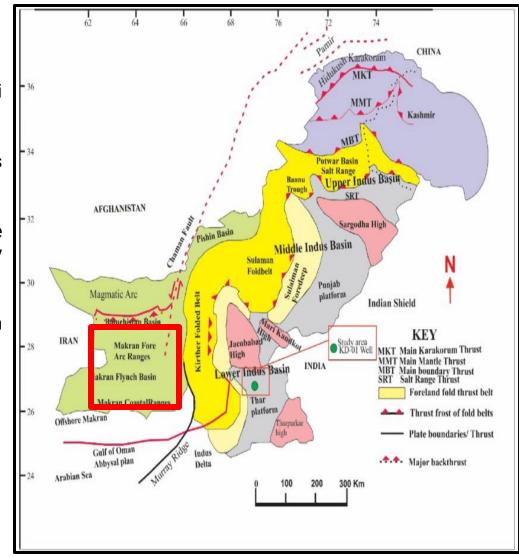
15.65

Balochistan

Geological Map

Tectonically the blocks lie in Southern Makran Fold Belt (Coastal).

- The Makran coast stretches about 800 km. The coast extends from Karachi (East) to Iran (West).
- The area is part of the accretionary complex, wherein the Arabian plate is subducting below the continental crust of the Eurasian Plate.
- The accretionary complex consists of low-taper wedge of deformed Late Eocene to Pliocene clastic sediments consisting of highly folded and densly faulted coast parallel belts and ridges.
- The age of the accreted sediments becomes progressively younger to the south towards Makran Trench, which is located 100-150 km offshore.





Petroleum System

Source Rock:

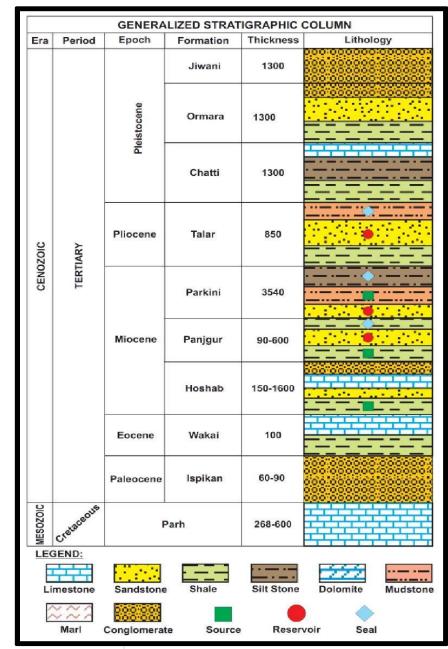
- 1. The main source rock of Makran Fold-belt include shales of Oligicene (Hoshab Formation), Miocene (Panjgur and Parkini Formation) and Pliocene (Talar/Hinglaj Formations).
- 2. The estimated organic matter for the source rocks ranges from about 0.48 wt. % to 5.62 wt. % TOC with gas generation potential.

Reservoir Rock:

- 3. Middle to Upper Miocene turbidities of Panjgur and Parkini Formation are considered as reservoir rocks.
- 4. Lithologically turbidities are fine to coarse grained sandstones with shale intercalations. Panjgur samples show sandstone porosities of up to 17.34%.

Seal:

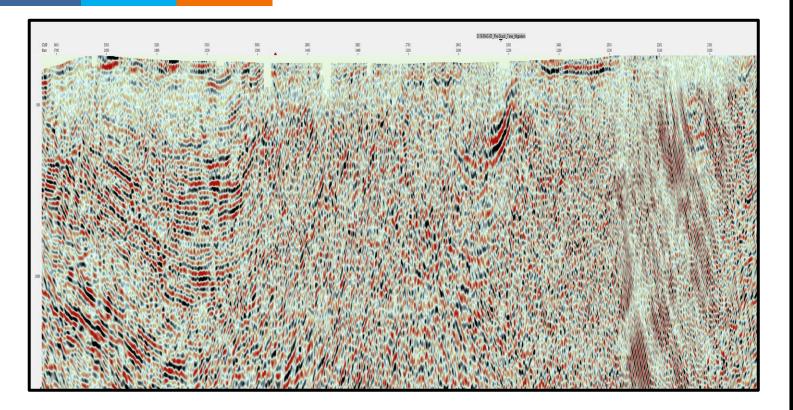
5. Shale horizons of abyssal sediments in Panjgur and Parkini formations are characteristically fine grained and well cemented which might provide an adequate seals



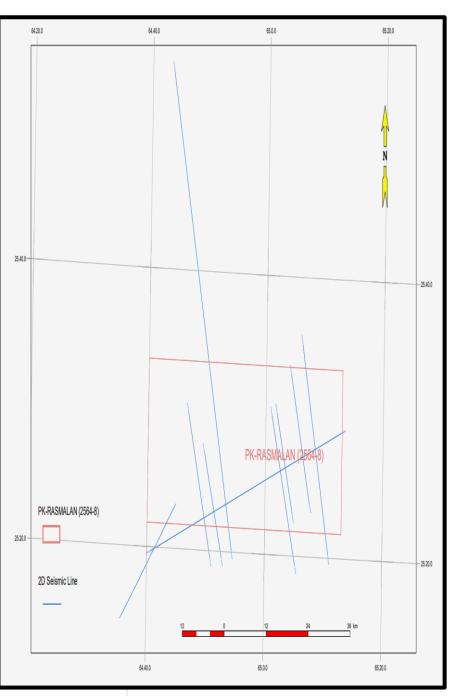


Cromie, Conall, et al. "Tectonostratigraphic evolution and hydrocarbon prospectivity south of Gwadar Bay, Makran accretionary wedge, offshore SW Pakistan." *Journal of Petroleum Geology* 45.2 (2022): 179-199.

Prospectivity

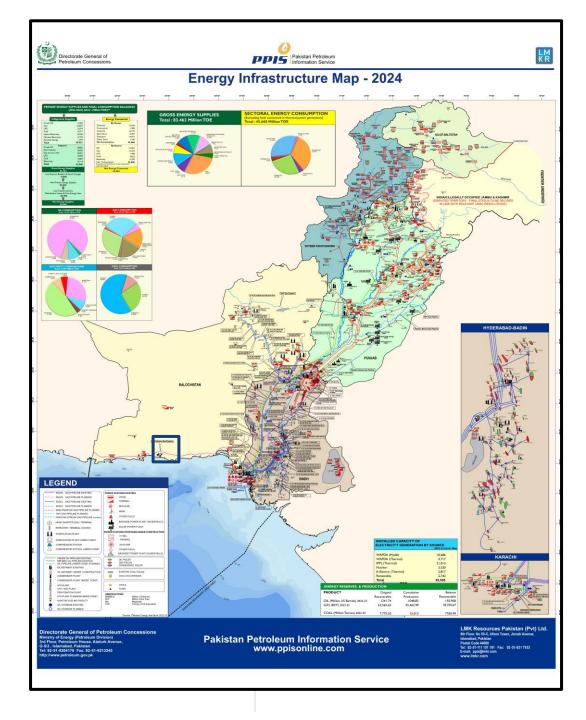


- The folds in Makran appear to be thrust related having anticlines that are most obvious potential traps.
- Folds in the area are associated with diapirism and thus may be considered as suitable targets for hydrocarbon exploration.
- Fair resolution seismic data can allow to delineate true potential of the block.



Infrastructure Map

- Government support to companies for infrastructure development.
- Gas fields exist near the block.
- Thermal power stations exist near the block.





Investment Benefits

- High risk, high reward.
- Largest gas discovery in the geographic province.
- Low cost on infrastructure development within limited timeframe.
- Return on Investment within 3 years.
- Attractive government policies for foreign investors.
- Excellent purchase rate set by the Government against the discovered commodity.
- Government will guarantee to buy the gas or oil discovered.
- Attractive price in case of tight gas discovery.



Block Summary

Item	Indicators
Probable multiple sources in the region	Positive Indicator
Discoveries in Geographical Province	Positive Indicator
Nearby Infrastructure	Positive Indicator
ROI in 3 Years	Positive Indicator



THANK YOU



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