

Smart Solutions for Today's Geoscientist



BLOCK: RASMALAN-II West (2564-9)

ONSHORE BLOCK BIDDING ROUND 2025

MINISTRY OF ENERGY PETROLEUM DIVISION (DGPC)

Introduction

- Rasmalan-II West Block covers an area of about 1451.97 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 Province:
 - Oil: 8,676 million barrels
 - Gas: 78 trillion cubic feet
- MARATHON and OGDCL acquired some 2D data approximately 364.56 L.
 Kms in the block within the years 1975 and 2016.
- The Block is surrounded by Samandar (East), Parkini-II Block-A and Parkini-II Block B (North) and Rasmalan-II (West) blocks.



| RASMALAN-II West (2564-9) | | Available Data | | Total Area (Sq. Kms) | Area by District | Percentage % | Districts |
|---------------------------|-------------|---------------------|--------|----------------------|------------------|--------------|-----------|
| Zone | L. | 2D Seismic (L.Kms) | 364.00 | 1,451.97 | 364.60 | 25.11 | Awaran |
| Grid Area | 18.77 | 3D Seismic (Sq.Kms) | NA | | 1087.37 | 74.89 | Gawadar |
| Province | Balochistan | No. Wells | NA | | | | |

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 sub ducting 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 densely 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





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.
- High 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

- Moderate risk, high reward.
- Largest gas discovery in the geographic province.
- Moderate 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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