

Smart Solutions for Today's Geoscientist



#### **BLOCK: Kot Magsi**

**ONSHORE BLOCK BIDDING ROUND 2025** 

MINISTRY OF ENERGY PETROLEUM DIVISION (DGPC)

## Introduction

- Kot Magsi Block covers an area of 2,213.43 sq km
- Location: Jhal Magsi, Nasirabad, Jaffarabad, Kambar/Shadad Kot and Jacobabad district, Sindh, Pakistan.
- Geological Basin: Lower Indus Basin, Pakistan.
- The block falls in Prospectivity Zone III
- Estimated mean undiscovered, technically recoverable resources of the Lower Indus Basin\*:
  - Oil: 164 million barrels
  - □ Gas: 24.6 trillion cubic feet
- Amoco, BP, OMV, Petronas, PPL and Texas acquired some 2D data in the block within the years 1976, 1978, 1982, 1992 and 2004.
- The Block is surrounded by Kotra East (North), Kambar (South), New Larkana and Dera Murad Jamali (East) and Kotra East and Mehar (West).
- The wells drilled in the near vicinity are:
  - Mazarani 01 05, Jhal Magsi South 01 & Mitto 01
- Major discoveries in the surrounding is from Jhal Magsi South



#### Directorate General Location Map of Kot Magsi Block 2767-5 (KAMBAF 11.22 400 k 35 03.61 2767-5 (KOT MAGSI) Available Data Total Area (Sq. Kms) Area by District Percentage 9 District ш 2D Seismic (L.Kms) 725.00 205.39 9.28 Jhal Magsi Grid Area 29.32 3D Seismic (Sq.Kms) NA 426.68 19.28 Nasirabad 2,213.43 999.92 45.18 Jaffarabad

Province

Sindh

No. Wells

NA

368.22

213.22

16.64 Kambar/Shahdad Kot 9.63 Jacobabad

# **Geological Map**

- Kot Magsi block lies in the western part of the low laying Raskoh Range.
- At surface, the Raskoh Range is a topographically elevated feature
- It is structurally controlled by thrusting and folding of Cretaceous to Oligocene strata.
- In the north this range is separated by an intervening low (Dalbandin Trough) from the Chagai Arc
- In the south by the Usman/Kukab transpressional fault, which dips northwest in direction from Kharan Trough.





### **Petroleum System**

- The basin wise success rate has been the highest for Lower Indus Basin because of strings of discoveries in quick succession in relatively small tilted fault blocks in Lower Goru reservoir.
- Sembar has been identified as the primary source rock for much of the Indus Basin. Other formations containing shale intervals may also act as source within this area as well.
- Potential reservoirs in the basin include Lower Goru sandstone (Cretaceous). The Sui Main Limestone and Sui Upper Limestone Member are also productive.
- The known seals in the system are composed of shales that are interbedded with and overlying the reservoirs, especially intra-formational shale for Lower Cretaceous reservoirs. Additional seals that may be effective include impermeable seals above truncation traps, faults, and undip facies changes.



(Pakistan Oilfield Limited, 2004).



## Prospectivity



- The main trapping mechanism in this area is considered to be thrust related anticlines
- In recent past, nearby blocks have successful gas discoveries.
- High resolution seismic data can allow to delineate true potential of the block





## Infrastructure Map

- Nearest infrastructure gas pipeline is available near the block.
- Towards south of the block, a pipeline connecting Jhal Magsi is planned
- Government support to companies for infrastructure development





#### **Investment Benefits**

- Moderate risk, high reward
- Major gas discoveries 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.
- Attractive price in case of tight gas discovery.



# **Block Summary**

Item	Indicators
Proven multiple sources in the region	Positive Indicator
Nearby discoveries	Positive Indicator
Nearby Infrastructure	Positive Indicator
ROI in 3 Years	Positive Indicator



THANK YOU



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