

Smart Solutions for Today's Geoscientist



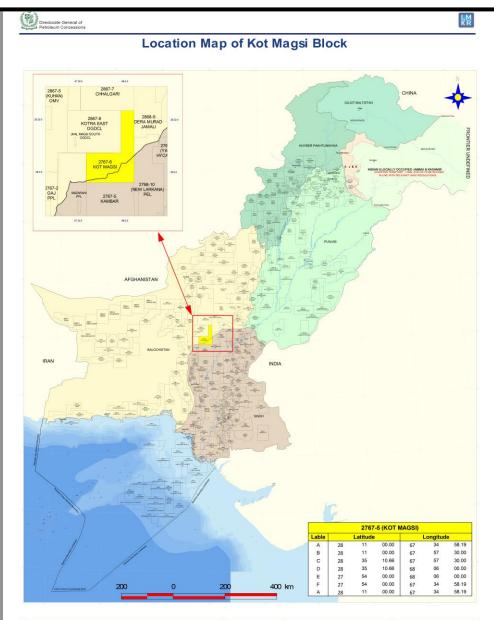
# BLOCK: KOT MAGSI (2767-6)

**ONSHORE BLOCK BIDDING ROUND 2025** 

MINISTRY OF ENERGY PETROLEUM DIVISION (DGPC)

# Introduction

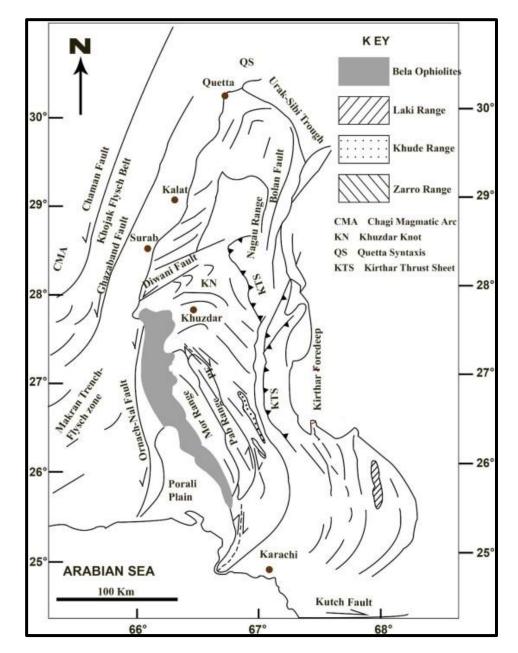
- Kot Magsi Block covers an area of 2213.43 Sq. Kms.
- Location: Nasirabad, Jhal Magsi, Jaffarabad, Kambar Shahdad Kot and Jacobabad district, Balochistan, Pakistan.
- Geological Basin:, Kirthar Foldbelt Pakistan.
- The block falls in Prospectivity Zone III.
- Estimated Resources of the Lower Indus Basin:
  - Oil: 4740 million barrels.
  - Gas: 64.75 trillion cubic feet.
- AMOCO, BP, OMV, PETRONAS and TEXAS acquired some 2D data approximately 724 L. Kms in the block within the years 1976, 1978, 1982, 1992 and 2004.
- The Block is surrounded by Dera Murad Jamali and New Larkana (East), Kotra East (North) and Kuhan and Gaj (West) blocks.
- The wells drilled in the near vicinity is Jhatpat-01, Jacocabad-01, 02 and 03 and David-01 and 1A.



2767-5 (KOT MAGSI)		Available Data		Total Area (Sq. Kms)	Area by District	Percentage %	Districts
Zone	ш	2D Seismic (L.Kms)	724.00	2,213.43	456.72	20.63	Jhal Magsi
Grid Area	29.32	3D Seismic (Sq.Kms)	NA		952.42	43.03	Nasirabad
Province	Balochistan	No. Wells	NA		197.04	8.90	Jaffarabad
					368.84	16.66	Jacobabad
					238.41	10.77	Kambar Shahdadkot

# **Geological Map**

- The collision of Indian and Eurasian plates resulted in the creation of north-south trending Kirthar Fold Belt (KBF) in the Southern Indus Basin.
- The basin is comprised of five structural elements units, i.e., Kirthar Fold Belt, Kirthar Foredeep, Karachi Trough, Thar Platform, and Offshore Indus.
- The present study area belongs to the western portion of Kirthar Foredeep, which is located between the Kirthar Foldbelt and Thar Platform.
- In the north of Kirthar Foredeep, Jacabobad Mari Kandkot high is present. It is bounded in the south by the Hyderabad high and in the east by the Tharpakar high in the west by KBF Bela Ophiolite.





Munir, Muhammad Nofal, Mohammad Zafar, and Muhsan Ehsan. 2022. "Comparative and Statistical Analysis of Core-Calibrated Porosity with Log-Derived Porosity for Reservoir Parameters Estimation of the Zamzama GAS Field, Southern Indus Basin, Pakistan." Arabian Journal for Science and Engineering 1–16.

### **Petroleum System**

#### Source Rock:

The Cretaceous Sembar shale are considered to be the main source rock in this area.

#### **Reservoir Rock:**

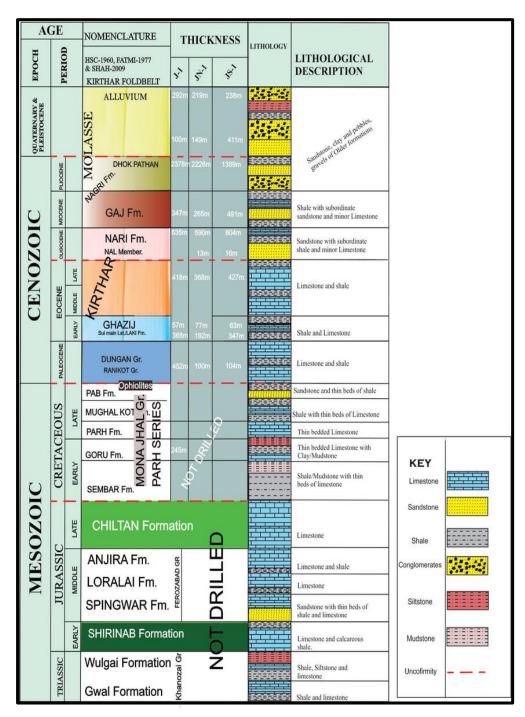
 Mughalkot (Upper Cretaceous), Pab sandstone (Upper Cretaceous), Sui main Limestone (Eocene) and Lower Goru sands (Early Cretaceous) with a porosity of 5 to 30 % act as major reservoir in Lower Indus Basin.

#### Seal:

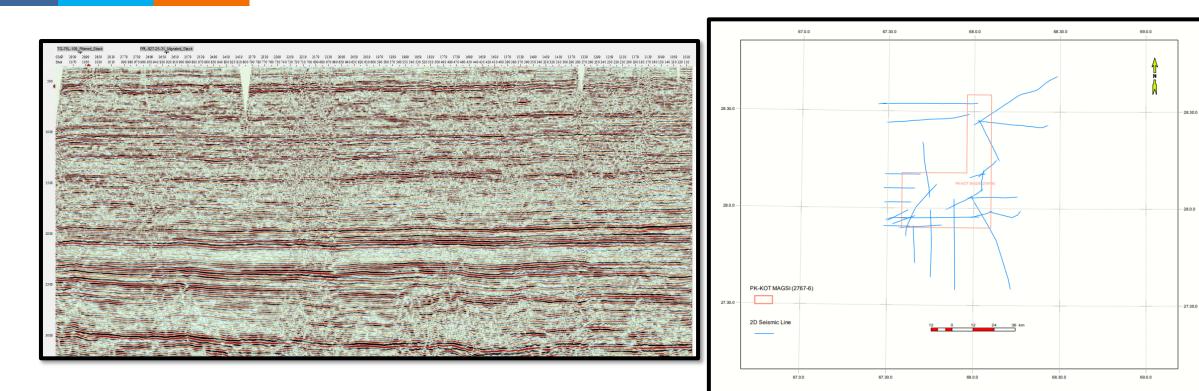
The Upper Goru marls and Ghazij shales act as seal for major reservoirs.

#### Trap:

Anticlinal traps associated with thrust faults are more common in the area.



### Prospectivity

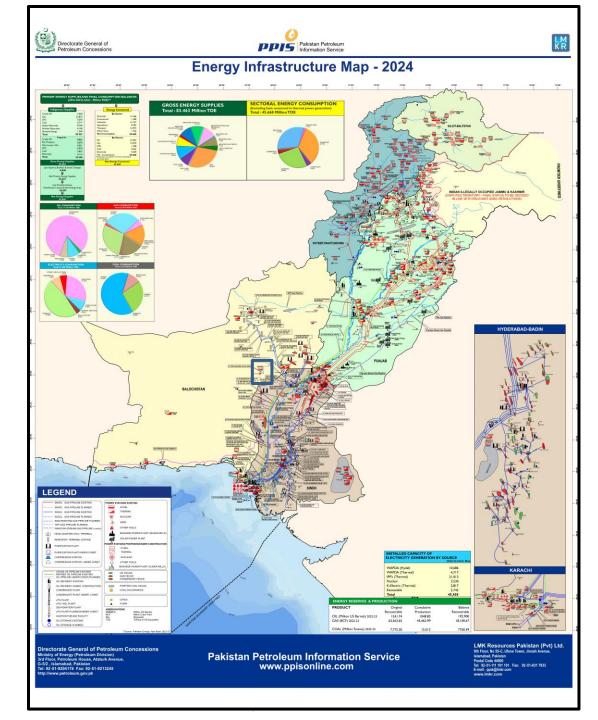


- The main trapping mechanism in this area is considered to be anticlines associated with thrust faults.
- In recent past, nearby blocks have successful gas discoveries
- High resolution seismic data can allow to delineate true potential of the block.



### Infrastructure Map

- Government support to companies for infrastructure development.
- Gas fields exists near the block.
- Hydel 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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