Smart Solutions for Today's Geoscientist

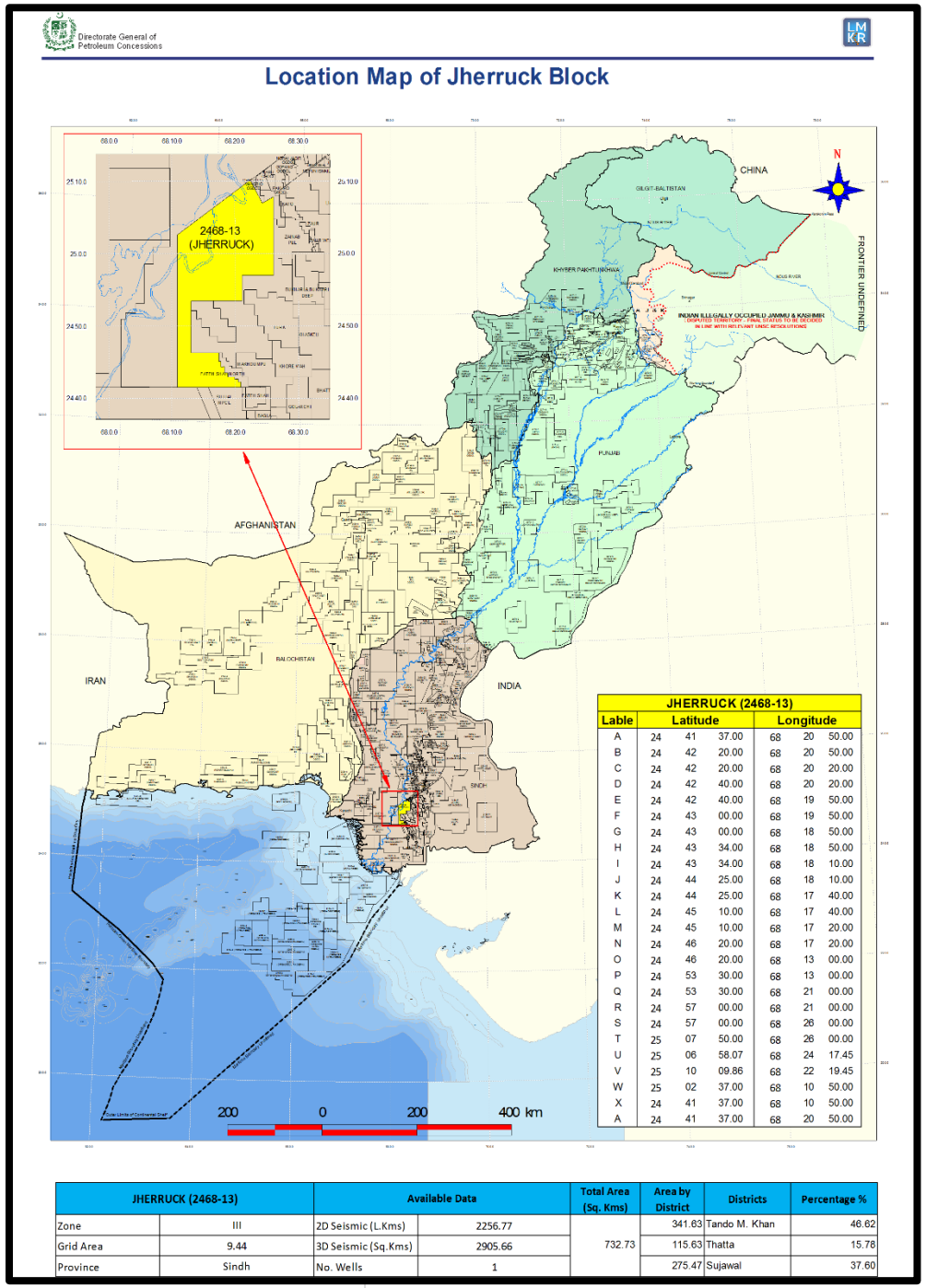
BLOCK: JHERRUCK 2468-13

ONSHORE BIDDING BLOCK BIDDING ROUND 2025

MINISTRY OF ENERGY PETROLEUM DIVISION (DGPC)

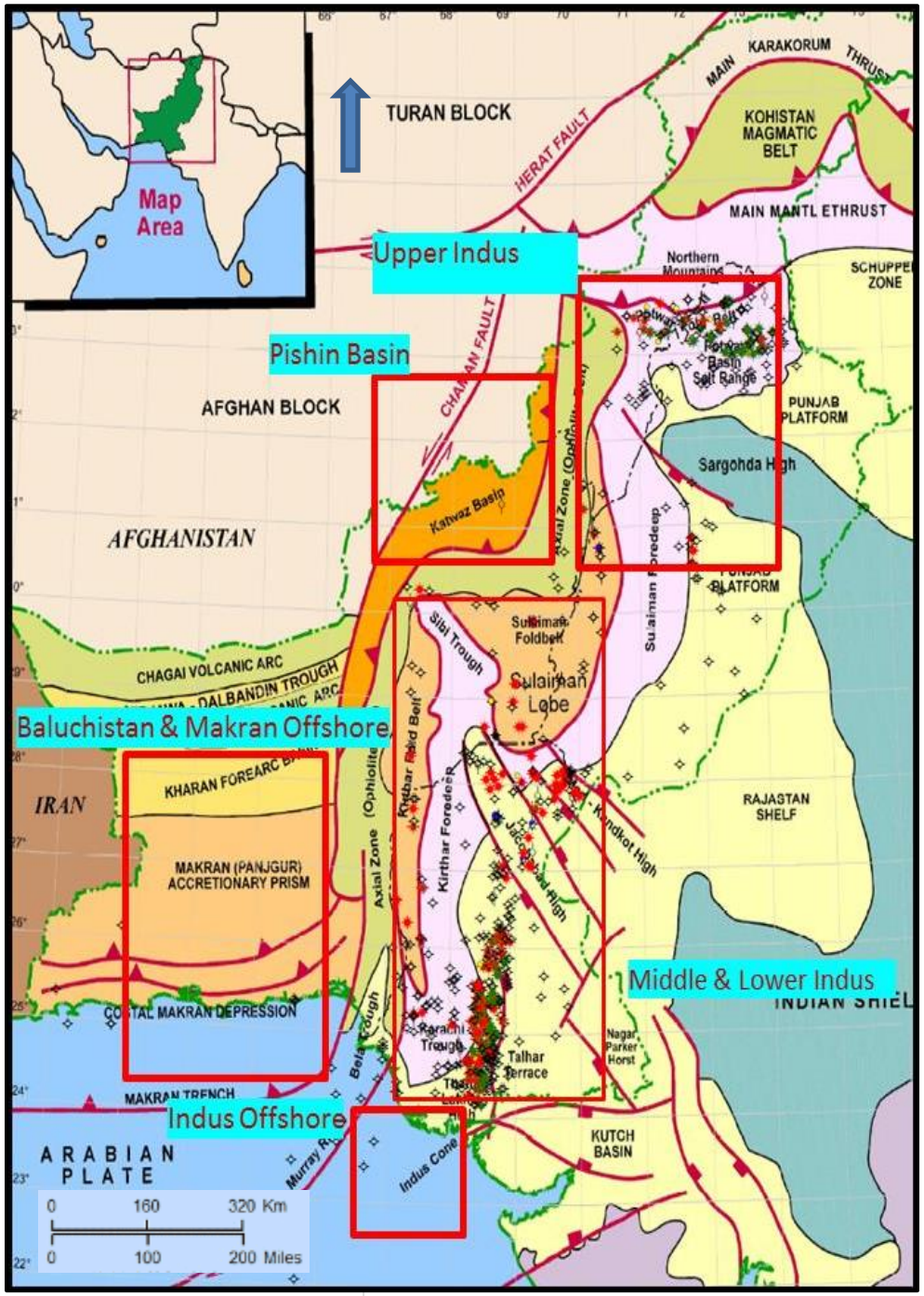
Introduction

- Jherruck Block covers the total area of 732.73 Sq. kms.
- Block lies in prospectivity zone 3.
- Geological Basin: Lower Indus Basin, Pakistan.
- Total 2D seismic available: 106 lines.
- Multiple 2D and 3D seismic surveys have been conducted by various companies like OGDCL, UTP and MPCL etc. during different times in this block.
- Total 2D seismic data coverage: 2256.77 L .kms.
- Total 3D seismic data coverage: 2905.66 Sq. kms.
- One well “Jherruck-01” is drilled within the block.



Geological History

- Tectonically the region is located in the south-eastern boundary of Lower Indus Basin, Geologically, it is a part of Thar Platform region with westward sloping monocline controlled by its basement topography.
- The platform marks very good development of Goru sands of Cretaceous age that acts as susceptible reservoirs for hydrocarbon fields.
- Due to phenomena of rifting and counterclockwise rotation of Indian plate, the study area exhibits extensional regime along with tilted horst blocks which serve as major structural traps of the area.
- The hydrocarbon accumulation in Lower Goru is bounded towards east and west by regional extensional faults dipping northeast and trending northwest to southeast as reported.



Khan, N. A. a. M. R., 2012. Evaluation of a Distinct Sub-Play for Enhanced Exploration in an Emerging Petroleum Province, Bannu-Kohat Sub-Basin, Pakistan. *AAPG International Conference and Exhibition.*

Petroleum System

Source Rock:

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

Reservoir Rock:

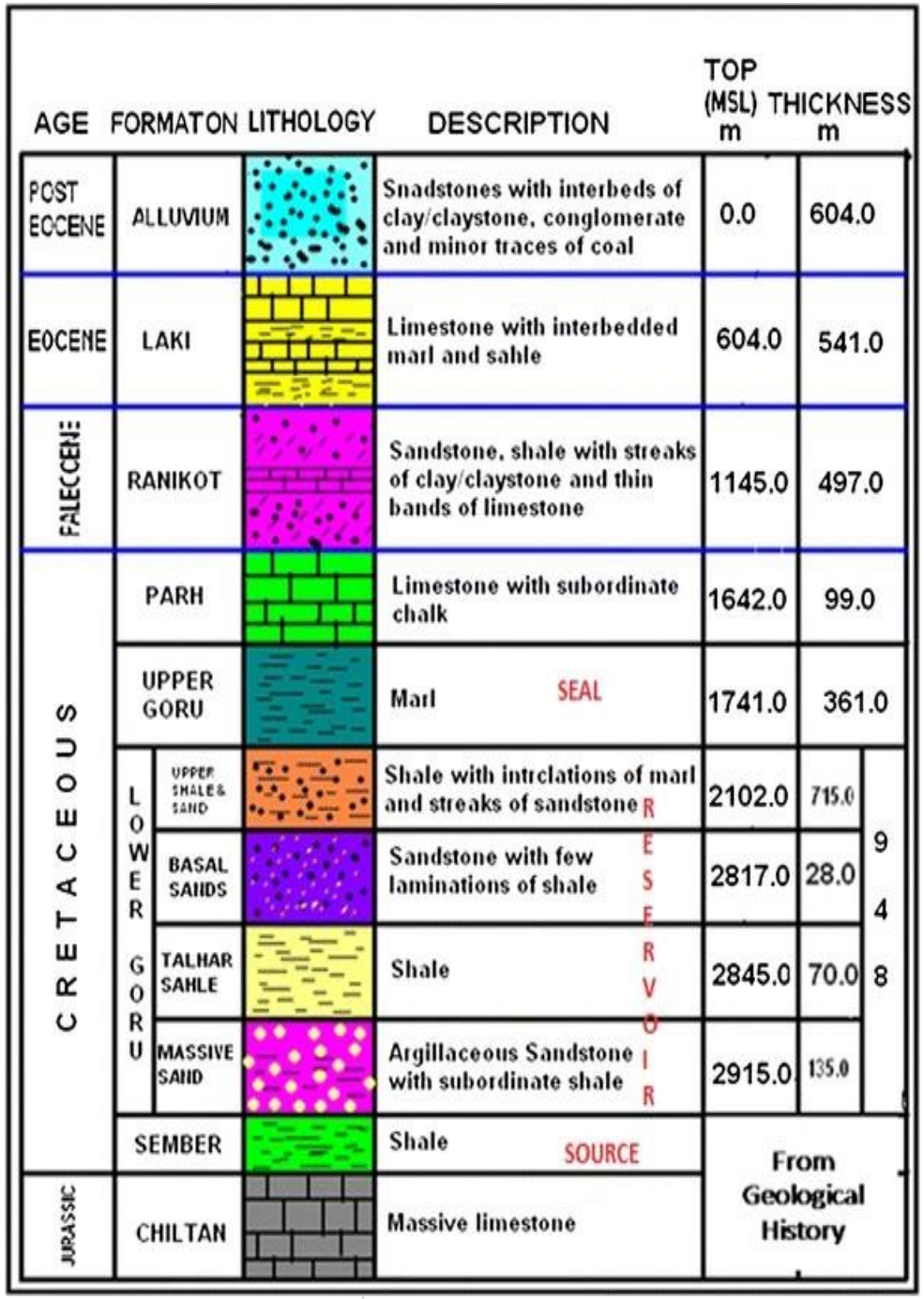
- Lower Goru sands with a porosity of 5 to 30 % act as major reservoir in Lower Indus Basin

Seal:

- The Upper Goru marls act as seal for Lower Goru sands.

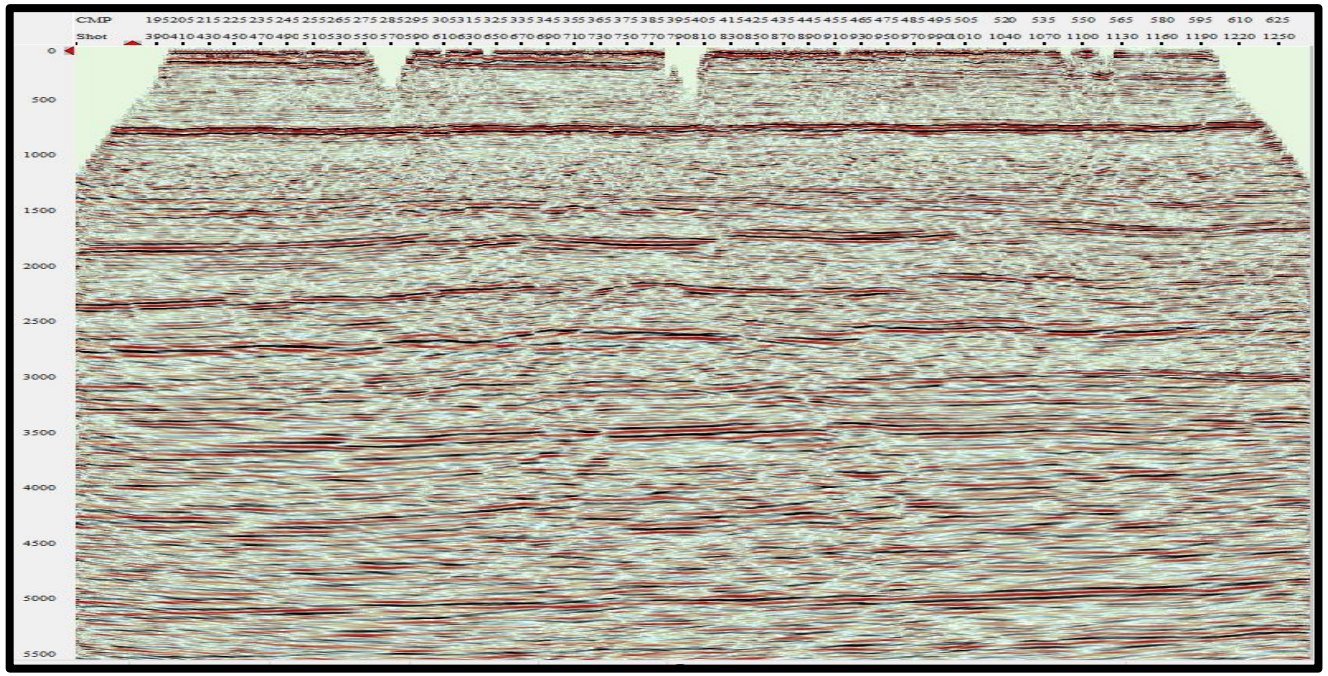
Trap:

- Due to phenomena of rifting and counterclockwise rotation of Indian plate, the area exhibits extensional regime along with tilted horst blocks which serve as major structural traps of the area.

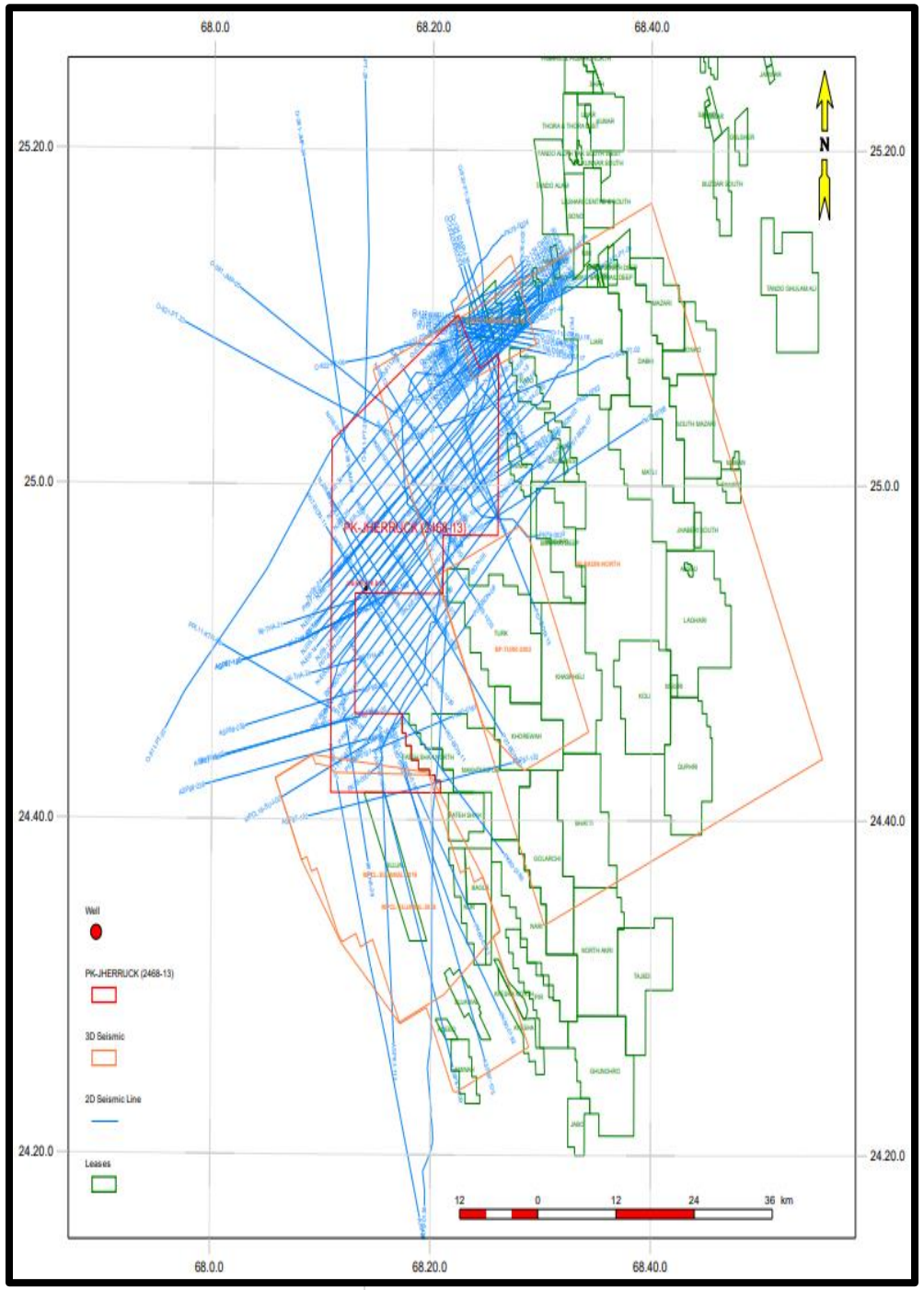


Akhter, Gulraiz, Zulfiqar Ahmed, Adnan Ishaq, and Aamir Ali. 2015. "Integrated Interpretation with Gassmann Fluid Substitution for Optimum Field Development of Sanghar Area, Pakistan: A Case Study." Arabian Journal of Geosciences 8:7467–79

Prospectivity

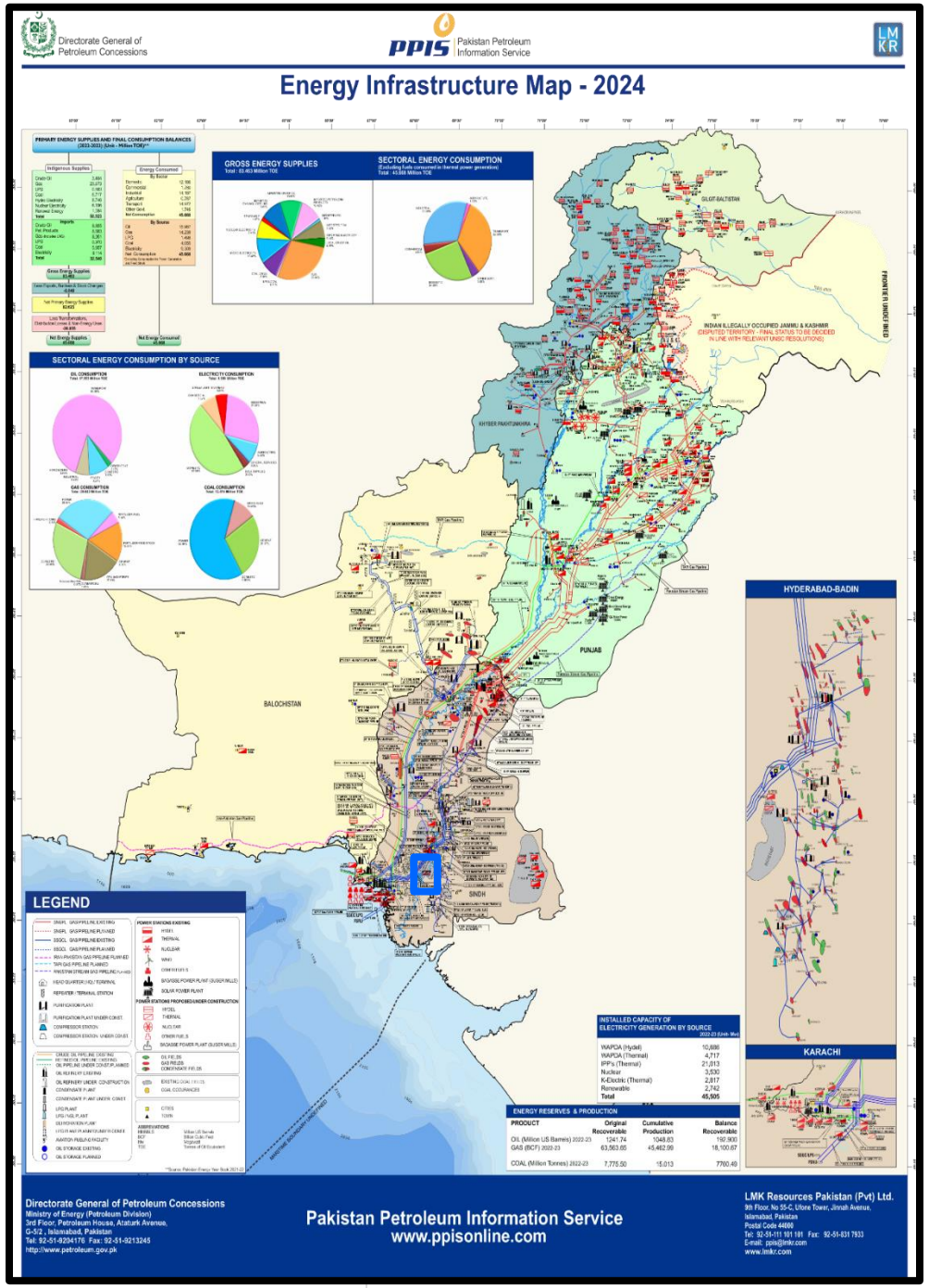


- The main trapping mechanism in this area is considered to be tilted fault block traps.
- High resolution seismic data can allow to delineate true potential of the block



Infrastructure Map

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



Investment Benefits

- Low risk, high reward.
- Prolific gas discoveries in the basin.
- 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
Possible multiple sources in the region	Positive Indicator
Discoveries in geological basin	Positive Indicator
Nearby Infrastructure	Positive Indicator
ROI in 3 Years	Positive Indicator

THANK YOU