



Smart Solutions for Today's Geoscientist



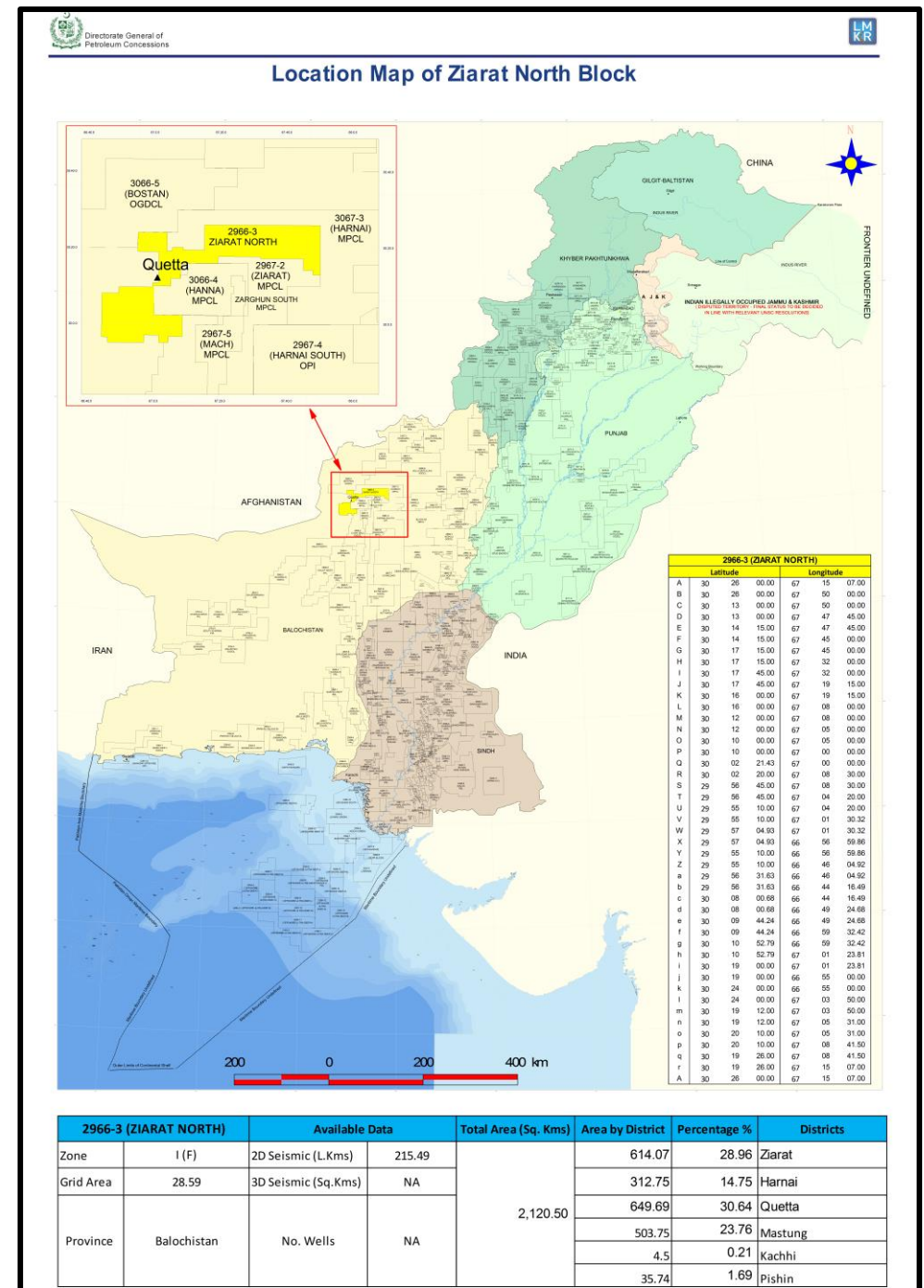
BLOCK: ZIARAT NORTH (2966-3)

ONSHORE BLOCK BIDDING ROUND 2025

MINISTRY OF ENERGY PETROLEUM DIVISION (DGPC)

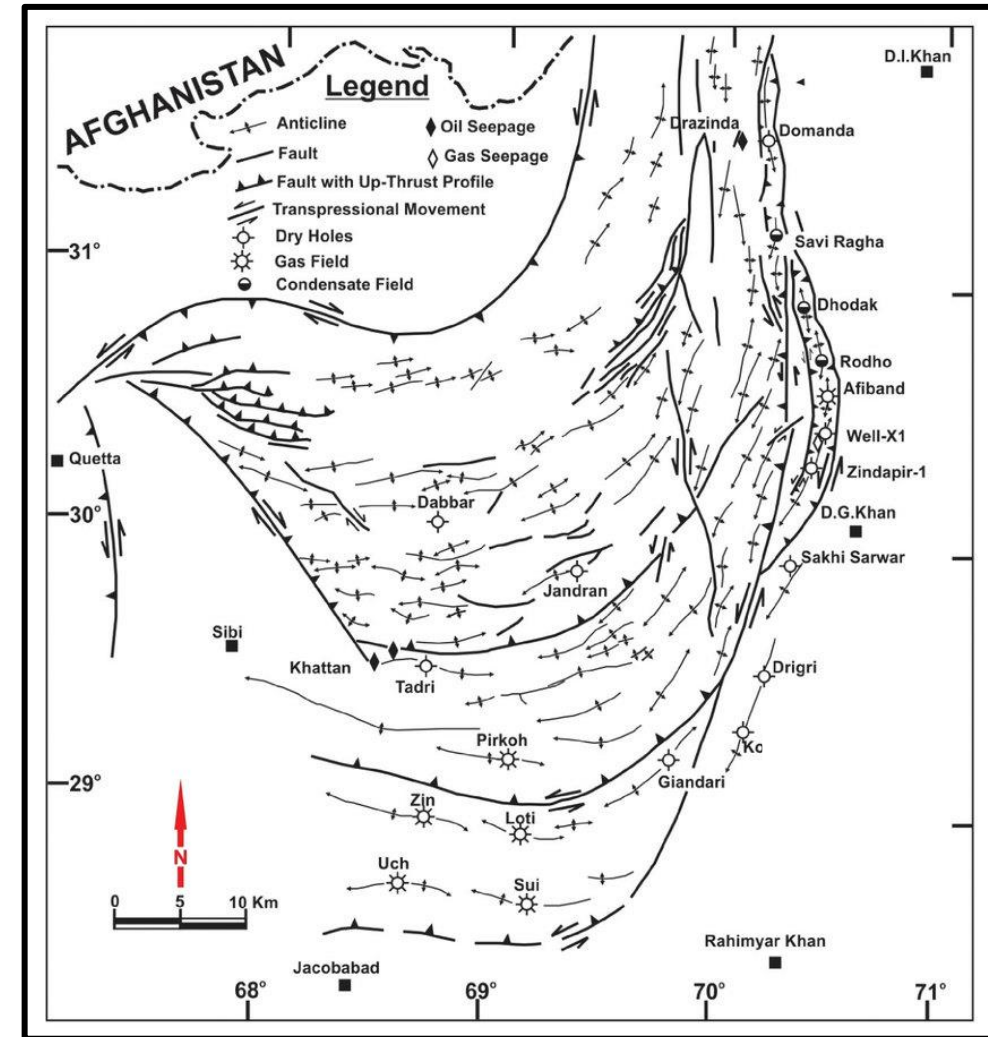
Introduction

- Ziarat North Block covers an area of 2120.5 Sq. Kms.
- Location: Ziarat, Harnai, Quetta, Mastung, Kachhi and Pishin districts, Balochistan, Pakistan
- Geological Basin: Sulaiman Foldbelt, Pakistan.
- The block falls in Prospectivity Zone I (F).
- Estimated Resources of the Central Indus Basin:
 - Oil: 2880 million barrels
 - Gas: 69.12 trillion cubic feet
- MGCL, OGDCL, PREM-BOL and MARI acquired some 2D data approximately 215.49 L. Kms in the block within the years 1992, 1996, 1997, 1998, 2004, 2009, and 2020.
- The Block is surrounded by Boston (North), Hanna (South) and Harnai (East) blocks.



Geological Map

- Sulaiman fold and thrust belt comprise of the widest fold-thrust belts in Pakistan.
- These fold belts are comprised of passive margins of Mesozoic platform carbonates, sands, muds, shales and volcanics which show a deep water affinity to the north.
- These deposits transition to younger siliciclastic sediments shed from newly forming Himalaya from the Eocene onwards and deposited in a shallow-water deltaic environment analogous to the modern-day Indus delta fan-system.
- Sulaiman ranges are uplifted and deformed passive margin sequence of the northwestern edge of the Indian Plate, now accreted to eastern edge of the Afghan Block and under thrust by Indian Plate.



Petroleum System

Source Rocks:

- Sembar Formation (Cretaceous) and Intra-Formational Shale units are the source rocks in the area.

Reservoirs:

- Pirkoh (Late Eocene), Habib Rahi (Middle Eocene), Sui main Limestone (Eocene), Dunghan (Paleocene) and first three sand intervals of Lower Goru Formation (Early Cretaceous) are reservoirs of the area.

Seal:

- Upper Goru Formation (Cretaceous), Ghazij Shale (Eocene) along with Sirki Shale (Eocene) acts as a seal.

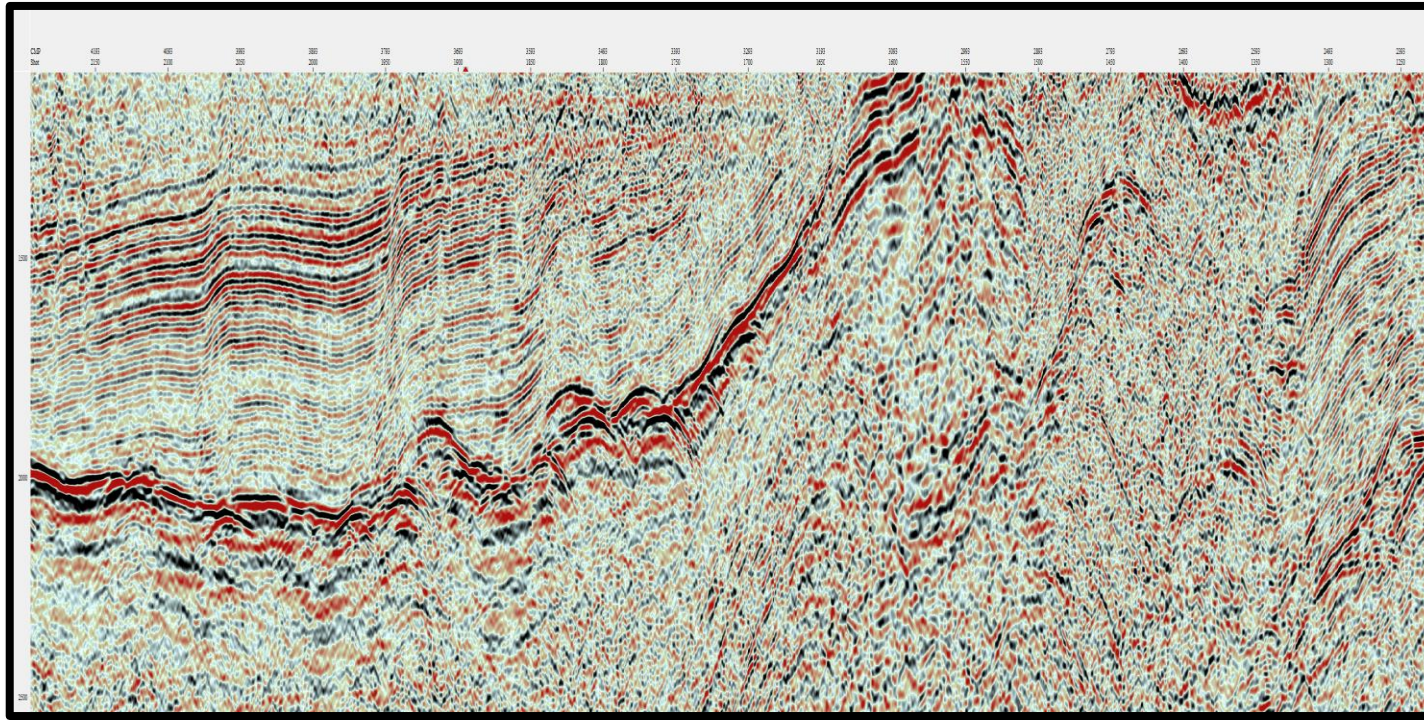
Trap:

- Both structural and stratigraphic traps are present.

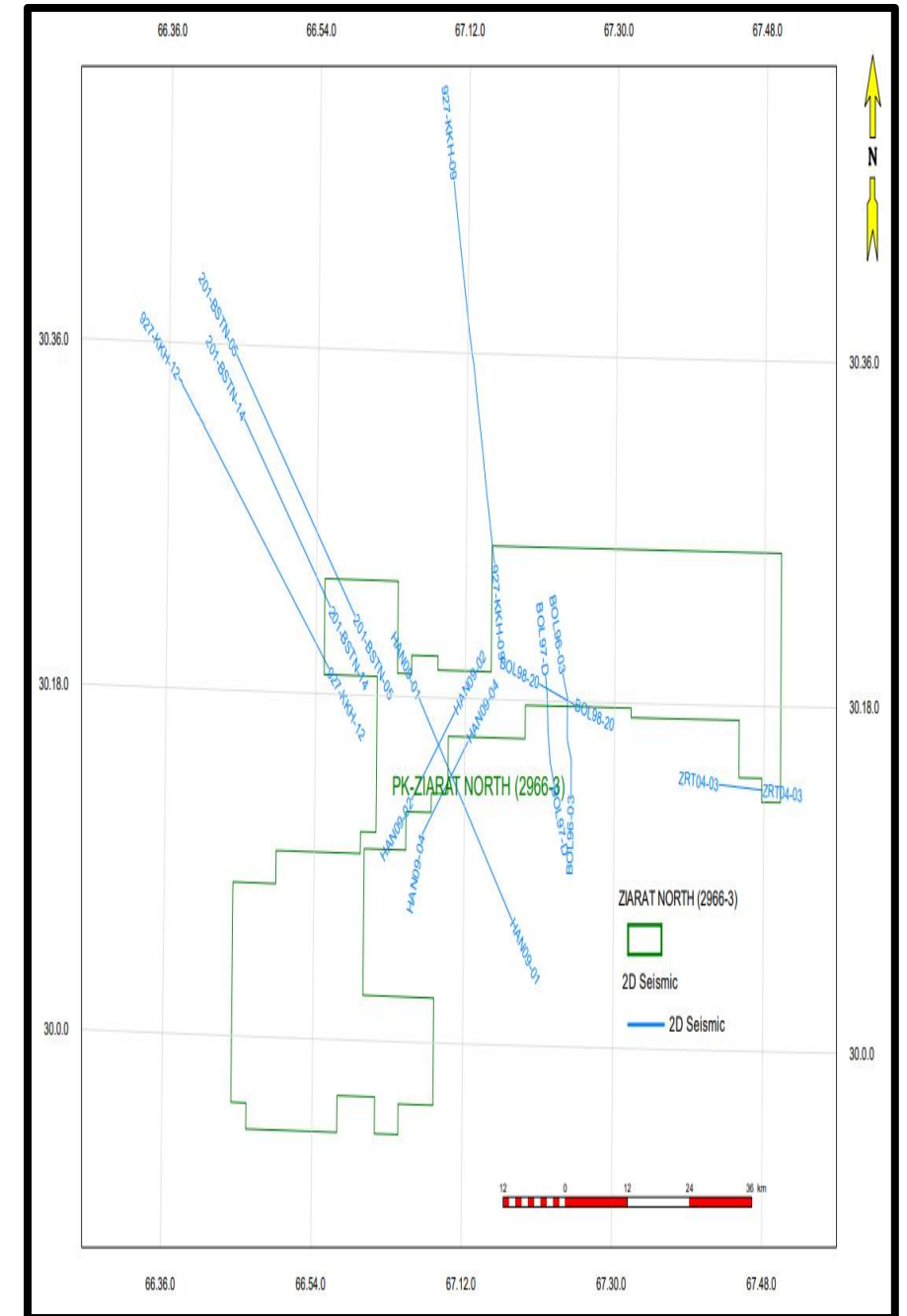
Generalized Stratigraphy of Sulaiman Fold Belt												
Era	Period	Epoch	Formation/Member	Lithology	Source	Reservoir	Seal					
Cenozoic	Neogene	Miocene-Pliocene	Siwaliks	Upper								
				Middle								
				Lower								
	Paleogene	Oligocene		Chitterwatta/Nari								
								Eocene	Laki/Ghajiz	Drazinda		
		Pirkoh										
Paleocene				Dunghan								
	Ranikot											
Mesozoic	Cretaceous	Late	Pab									
							Mughalkot/Fort Parh					
		Early	Goru	Upper			Proved	Sands				
	Lower											
	Jurassic	Late		Sembar								
								Middle	Chiltan		Probable	Carbonate
Early												
Triassic		Wulgai / Allozai										
Paleozoic	Probable deposition			Lithology ?								

Legend			
Sand Stone		Shale	
Lime Stone		Unconformity	

Prospectivity

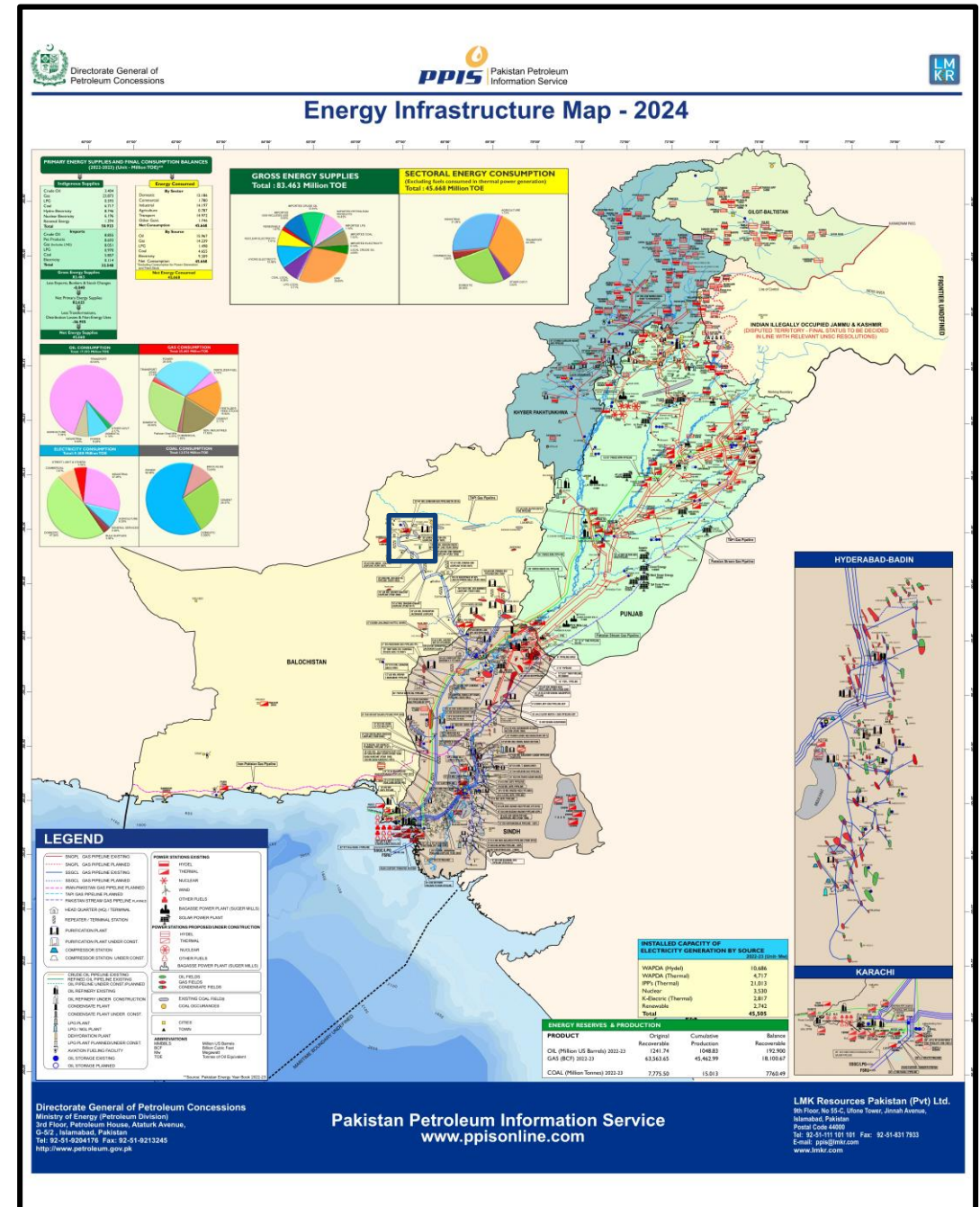


- The main trapping mechanism in this area is considered to be anticlinorium structure and stratigraphic pinch outs.
- In recent past, nearby blocks have successful gas discoveries
- High resolution seismic data can allow to delineate true potential of the block.



Infrastructure Map

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



Investment Benefits

- Low 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

