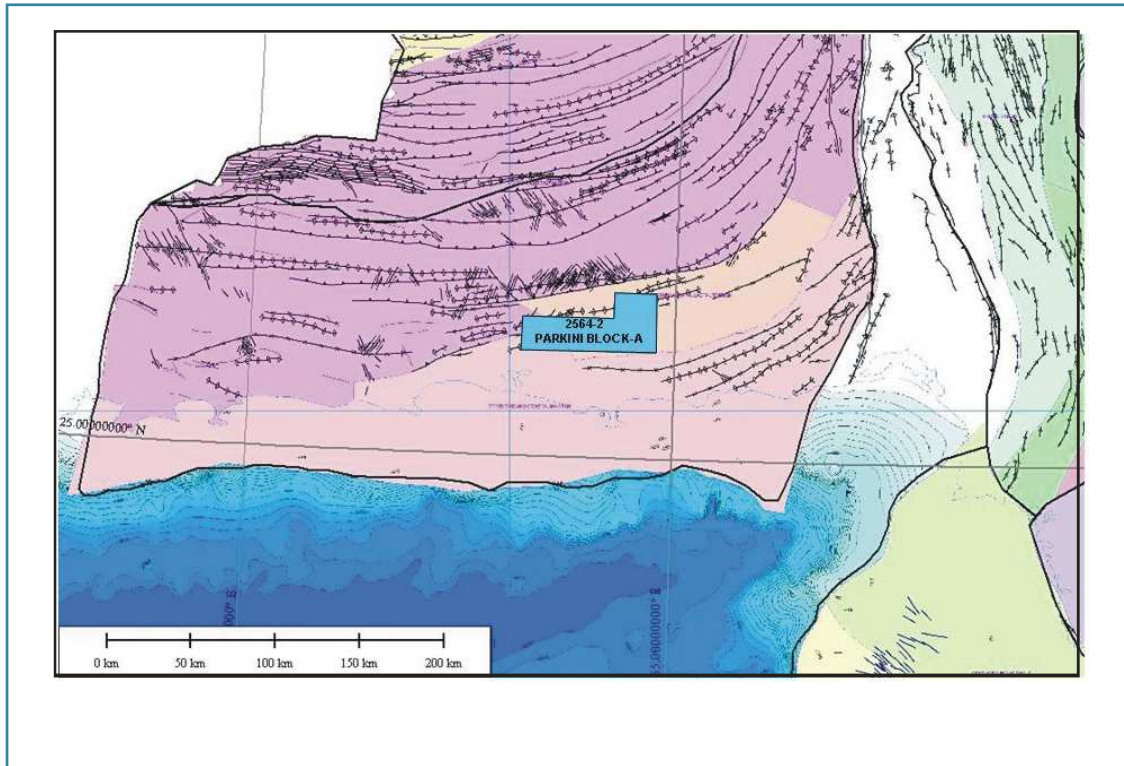


MAKRAN FOLDBELT BASIN

INTRODUCTION

The Parkini Block-A is located in southern margin of Makran Foldbelt region in Balochistan province.



TECTONIC SETTING

Makran Foldbelt is bounded in the north by the Balochistan Foldbelt and in the east by the Porali Trough. To the west, the province continues into Iran and is separated from the Zagros Collision Zone by the Zendan fault. The Makran Foldbelt is an east-west trending tectono-stratigraphic province composed of two sectors, an accretionary prism in the south and the

Panjgur Wrench Zone in the north. The evolution of the Makran Foldbelt was initiated in the Middle Oligocene, due to collision between the Makran and the Lut microplates. The accretionary complex consists of a low-taper wedge of deformed Late Eocene to Pliocene sediments, exposed in arcuate zones of highly folded and densely faulted coast parallel mountain belts and ridges. The age of the accreted sediment becomes progressively younger to the south towards the Makran Trench, which is located 100-150 km in offshore.

STRATIGRAPHY

Parh Formation is the oldest unit which has sporadic exposures in Makran Foldbelt Basin and consists of limestone with shale and marl intercalations. Palaeocene-Early Eocene is represented by conglomerates of Ispikan Formation, limestone, marl and shale of Wakai Limestone.

Limestone of Nisai Formation (Eocene) unconformably overlies the Wakai Limestone. Siahn / Hoshab Formation (Oligocene) is exposed in the central part of the basin and dominantly shale with subordinate sandstone, limestone and conglomerate intervals. Siahn / Hoshab Formation is overlain by middle Miocene Panjgur Formation which consists of sandstone and marine shale

PERIOD	EPOCH	T-R CYCLES	GEOLOGICAL PROCESSES	UNIT
NEO-GENE	MIOCENE	[Diagram showing T-R cycles with blue and orange triangles]	FORE-ARC BASIN DEVELOPED DURING COLLISION OF MAKRAN & HELMAND BLOCKS SUBDUCTION & DEVELOPMENT OF ACCRETIONARY PRISM	HINGLAJ TALHAR KECH
	OLIGOCENE			PARKINI SGHALU PANIGUR HOSHAB MURGHA FAQIR ZAI
PALEOGENE	EOCENE	[Diagram showing T-R cycles with blue and orange triangles]	SHALLOW MARINE FORE-ARC BASIN DEVELOPED DURING OCEAN-OCEAN SUBDUCTION	WAKAI
	PALEOCENE			ISPIKIN
CRETACEOUS	LATE	[Diagram showing T-R cycles with blue and orange triangles]	SHALLOW MARINE FORE-ARC BASIN DEVELOPED DURING OCEAN-OCEAN SUBDUCTION	PARH
	EARLY			
JURASSIC	LATE	[Diagram showing T-R cycles with blue and orange triangles]	SHALLOW MARINE FORE-ARC BASIN DEVELOPED DURING OCEAN-OCEAN SUBDUCTION	
	MIDDLE			
	EARLY			
TRIASSIC	LATE	[Diagram showing T-R cycles with blue and orange triangles]	SHALLOW MARINE FORE-ARC BASIN DEVELOPED DURING OCEAN-OCEAN SUBDUCTION	
	MIDDLE			
	EARLY			
PERMIAN		[Diagram showing T-R cycles with blue and orange triangles]	SHALLOW MARINE FORE-ARC BASIN DEVELOPED DURING OCEAN-OCEAN SUBDUCTION	

intervals. Panjgur Formation is followed by Late Miocene Parkini/Talar Formation which in turn is overlain by Plio-Pliocene sediments of Kamberod, Chatti Formation, and Ormara and Jiwani formations.

PETROLEUM SYSTEM

There is no oil and gas discovery in the basin so far, however the presence of numerous gas seeps within the Makran coastal area, gas shows and traces of heavier hydrocarbons in wells drilled provide favorable evidence for a viable petroleum system in the basin.

SOURCE ROCKS

Source rock facies are present at various stratigraphic levels, ranging in age from Late Oligocene to Pliocene. Hoshab/Siahhan formations of Late Oligocene to Early Miocene age have terrestrial source (type III) shale interbedded with thin beds of sandstone. Panjgur Formation has good TOC values with Type II-III organic matter. Parkini Formation of Late Miocene age also possesses fair source potential for gas. Talar Formation of Pliocene age has potentially fair source facies with Type III organic matter.

RESERVOIR ROCKS

Reservoir facies in Makran ranges in age from middle Miocene to Pleistocene. Middle to upper Miocene Panjgur Formation which consists of clastic turbidites, deposited in stacked sequences ponded within “piggyback” basins above thrusts has reservoir potential. Pliocene shelf sediments and deep water turbidite intervals have fair to good reservoir characteristics.

SEAL ROCKS

Miocene to Pliocene stratigraphic sequence in Makran area has sufficient shale horizons to seal hydrocarbons in immediately underlying reservoirs.



MAKRAN FOLDBELT BASIN CO-ORDINATES FOR NEW BLOCKS				
VERTICES	LONG_DMS	LAT_DMS	BLOCK NAME	AREA COVERED
A	64°06' 00"	25°44' 30"	2564-2 PARKINI BLOCK-A	1892.10 Sq.Kms
B	64°38' 20"	25°44' 30"		
C	64°38' 20"	25°52' 40"		
D	64°53' 00"	25°52' 40"		
E	64 53' 00"	25 34' 00"		
F	64 06' 00"	25 34' 00"		
A	64 06' 00"	25 44' 30"		



