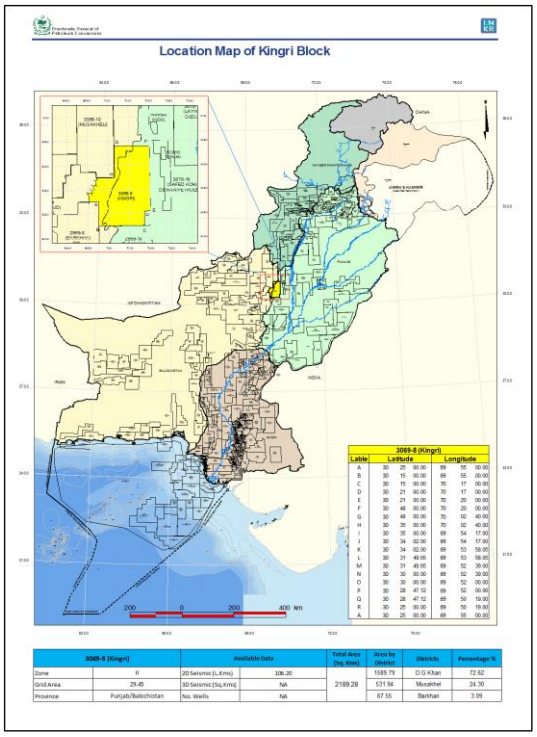
KINGRI BLOCK (3069-8)

Introduction

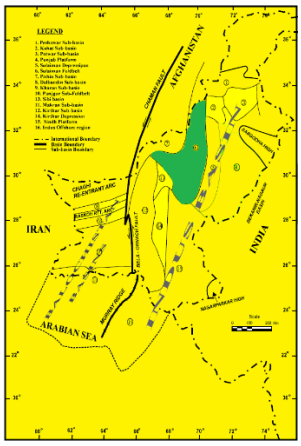
Kingri Block covers an area of 2189.28 sq km and is located in D.G Khan, Musakhel, and Barkhan districts of Punjab and Balochistan Pakistan. Geologically, it lies in the Central Indus Platform Basin of Pakistan. The block falls in Prospectivity Zone II.



Geology and Tectonics

The Central Indus Platform Basin is divided into Sulaiman Fore belt and Sulaiman Fore deep. Sulaiman characterizes a blind thrust front which suggests that all frontal folds of the fold belt are cored by blind thrust. The passive roof duplex is represented by the deformation front of Sulaiman Lobe which is set beneath the frontal passive roof thrust. The passive roof thrust spreads into interior of Fold belt having a back thrust sense of motion. Kingri Fault, which is left lateral, splits Eastern and Central Sulaiman fold belt. The deformation front moved further towards fore deep in Central Sulaiman fold belt as compared to Eastern Sulaiman. The trend of the structures is roughly towards east west direction perpendicular to tectonic direction. In Eastern Sulaiman Range, the base is progressively dipping eastward beneath the deformation front.

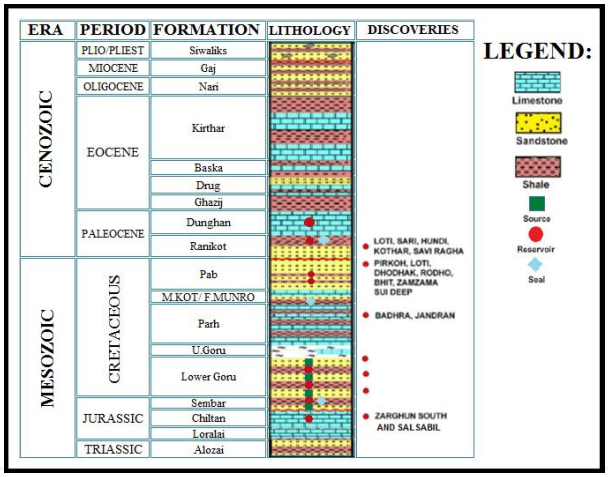
Geological Map (Modified after Ahmed et al, 1994)



Stratigraphic Sequence

In this block area, a thick cover of clastics and carbonates sediments are present and probably the Cambrian succession is similar to the one that occurs in the Kohat-Potwar Fold Belt. In southeast, the succession is younger as compared to the northwest direction. In Permian and Jurassic there is distinct break in the intraformational sediments, while there is regional unconformity in Cretaceous and Tertiary strata. Jurassic rocks are exposed in some part of the basin because of intense erosion.

Generalized Stratigraphic Chart



Petroleum Geology

A proven petroleum system is present in Sulaiman Fold belt and Fore deep region. The carbonates and sandstones of Jurassic to Eocene age are mainly gas reservoirs whereas in some parts of the basin Cretaceous and Eocene reservoirs are gas or condensate producers. In Upper Goru (Cretaceous), Upper Ranikot claystone (Paleocene), and Ghazij shales (Eocene) thick sealing shales are present in addition to intraformational shale/claystone seals in the entire stratigraphic column. The proven hydrocarbon traps in fold belt region are the thrust anticlines of Oligocene and younger strata but in the fore deep region none of the identified structures is a commercial producer.

Source Rock

The main source intervals revealed by the results of outcrops and well cuttings geochemistry are Sembar and Lower Goru (Cretaceous) shales. Sembar Formation is found throughout most of the Sulaiman region and its source quality varies widely. Fair to good organic carbon contents are found in outcrops in some areas.

Reservoirs

The primary reservoirs are Lower Goru sands (Cretaceous). Secondary targets may include, from older to younger, Chiltan (M. Jurassic) and Sembar (Cretaceous). Both the primary as well as the secondary reservoirs are proven reservoirs in different parts of the Sulaiman Region. In this block, Alozai Sands (Triassic) can also act as a reservoir.

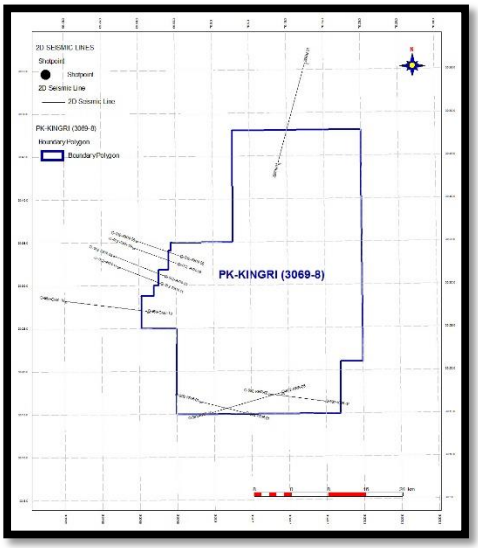
Seal

In Sulaiman fold belt region, major shale/claystone intervals exist which can act as effective top seal in their respective plays. For the Chiltan Play, the proven seal is Sembar shale (~600ft) in the entire region. Besides this, intraformational shales, transition zones over Parh and Chiltan act as seal.

Traps

The structural traps (thrust anticlines) are trending in NE-SW direction with four way closure formed by compressional as well as transpressional forces resulting from Indian Plate collision with Eurasian Plate. The faults are considered as migration pathway.

Kingri Block Base Map



Well Data

Well is not drilled in this block.

Seismic Data

2D SEISMIC DATA	3D SEISMIC DATA
Line km = 106.20	3D data is not available