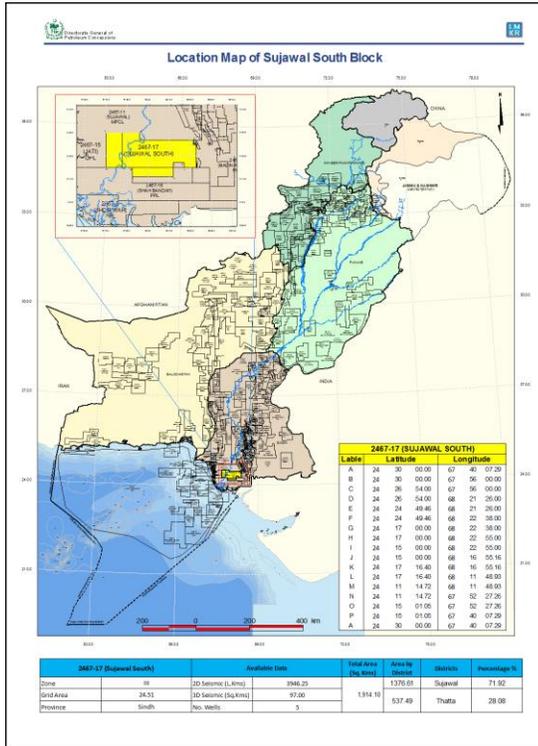


Introduction

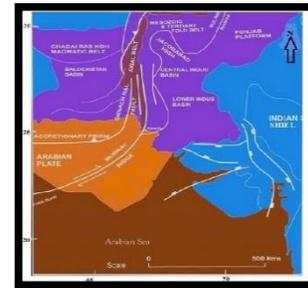
Sujawal South Block, covers an area of 1914.10 sq km and is located in Sujawal and Thatta districts of Sindh Pakistan. Geologically, it lies in the Southern Indus Basin of Pakistan. The block falls in Prospectivity Zone III.



Geology and Tectonics

The Lower Indus Platform Basin is bounded by the Central Indus Basin to the north, the Sulaiman Fold belt Basin to the northwest and to the Kirthar Fold Belt Basin in the west. The rifting of the Indian Plate from Gondwanaland (Jurassic or Early Cretaceous) is the main tectonic event controlling the structures and sedimentology of the Lower Indus Basin which perhaps caused eastwards tilting and uplift at the start of the Cretaceous. In the west of the Lower Indus Basin, sinistral transpression results in Himalayan collision, with fold-thrust structures overprinted by sinistral flower structures.

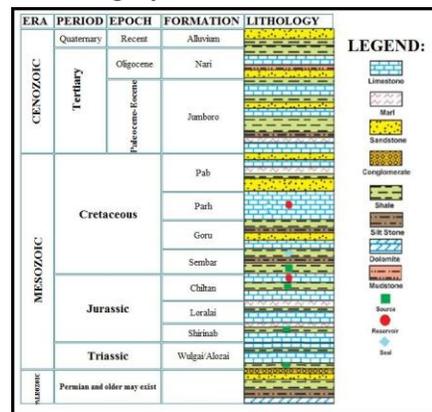
Geological Map (modified after Kazmi and Rana, 1982)



Stratigraphic Sequence

This tectonic province is underlain by Infra Cambrian to Recent clastics and carbonates. It remained passive margin until the Late Cretaceous, then became part of the complex suture between the Indian Plate and the Afghan Block. The stratigraphic succession changes from east to west. Precambrian basement is exposed in the southeastern corner of the basin. The thickness of the sediments increases westward.

Generalized Stratigraphic Chart



Petroleum Play

The basin wise success rate has been the highest for Lower Indus Basin because of strings of discoveries in quick succession in the relatively small tilted fault blocks in the Lower Goru reservoir.

Source

Sembar has been identified as the primary source rock for much of the Greater Indus

Basin, there are other known and potential source rocks. Rock units containing known or potential source rocks include the Salt Range Formation (Eocambrian) shales, Dandot and Tredian Formations (Permian), Wulgai Formation (Triassic), Datta Formation (Jurassic), Patala Formation (Paleocene), Ghazij Formation (Eocene), and lower shales of Miocene.

Reservoir

Potential reservoirs in the basin include Chiltan limestone (Jurassic) which also have commercial quantities of hydrocarbons in surrounding fields. The Parh Limestone (Cretaceous) is also very productive.

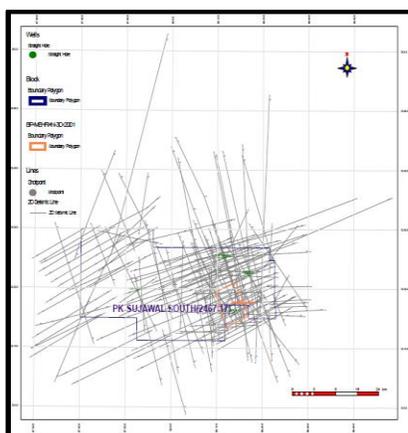
Seal

The known seals in the system are composed of shales that are interbedded with and overlying the reservoirs, especially intra-formational shale for Lower Cretaceous reservoirs. Additional seals that may be effective include impermeable seals above truncation traps, faults, and undip facies changes.

Trap

The tilted fault traps in the Lower Indus Basin are a product of extension related to rifting and the formation of horst and graben structures.

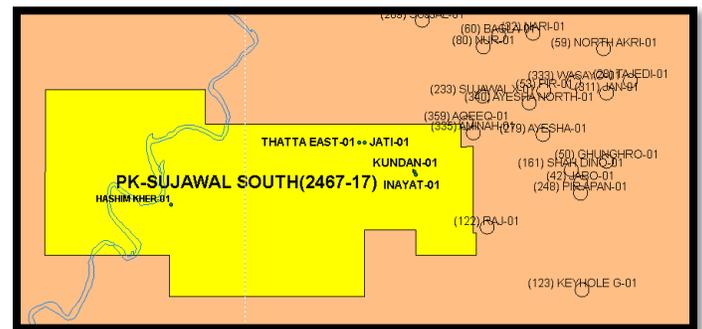
Base Map



Well Data

WELL NAME	SPUD DATE	OPERATOR	WELL TD (m)	TD FORMATION
HASHIM KHER-01	4/30/2007	OGDCL	4125	Chiltan
INAYAT-01	3/14/2004	BP	2560	Lower Goru
JATI-01	2/18/1981	BP	3081	Lower Goru
KUNDAN-01	10/9/2015	KPBV	4066	Lower Bassal Sand
THATTA EAST-01	9/17/2008	OGDCL	3500	Lower shale

The discoveries in the surrounding area are Raj-01, Benari X-01, Keyhole G-01, Jabo-01 many other are in NE direction.



Seismic Data

2D SEISMIC DATA	3D SEISMIC DATA
Line km = 3,946.25	Area = 97 sq.km

Seismic Line

