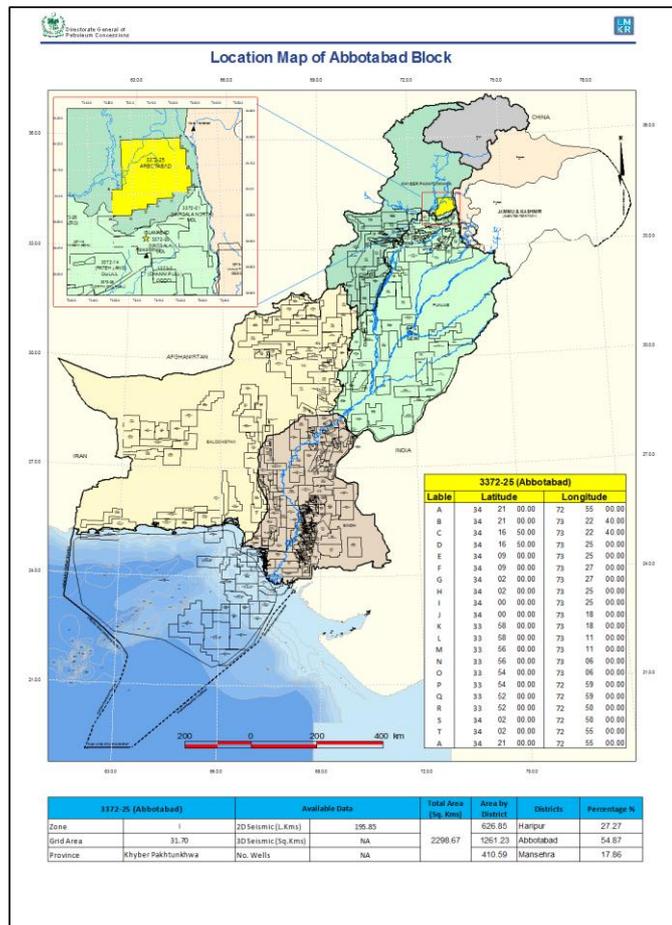


ABBOTABAD BLOCK (3372-25)

Introduction

Abbottabad Block, covers an area of 2298.67 sq km and is located in Abbottabad, Haripur and Mansehra districts of Khyber Pukhton Khwa (KPK) Pakistan. The block is located about 120 kilometers north of Islamabad through Karakoram Highway and 152 kilometers east of Peshawar. Geologically, it lies in the Peshawar Basin of Pakistan. The block falls in Prospectivity Zone I.

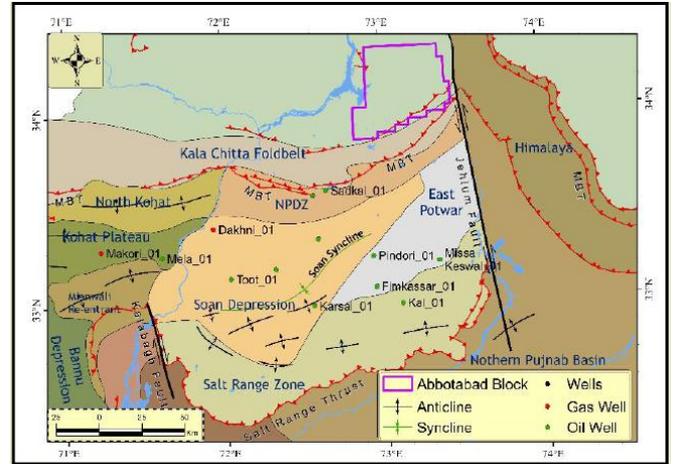


Geology and Tectonics

Tectonically, Abbottabad Block is located in Upper Indus Basin where it is bounded by Main Central Thrust (MCT) in the north, Main Boundary Thrust (MBT) in the southeast and Indus River in the west. Generally, the structures in this area are developed as a result of compression and the entire zone is part of the Lesser Himalayas. Khairabad Fault runs across the Abbottabad Block which trends in northeast-southwest direction.

Mostly NE-SW trending folds are present, which have been disturbed by dip-slip faults.

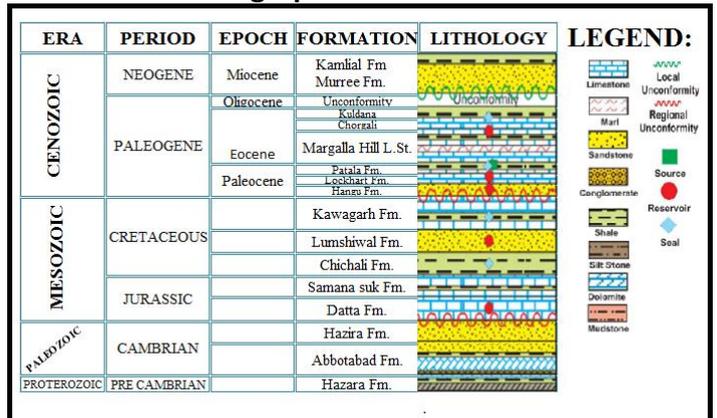
Geological Map



Stratigraphic Sequence

Stratigraphy of this region ranges from Infra-Cambrian to Mio-Pliocene. The block mostly consists of Precambrian to Eocene strata. Cambrian age granite and metamorphic rocks constitute the northern part whereas Permian to Eocene sedimentary sequence is present in the southern portion of this block area.

Generalized Stratigraphic Chart



Petroleum Play

Abbottabad block is a lead or unexplored area where the petroleum plays can only be illustrated analogous to the Kohat-Potwar Basin. Permian-Eocene prolific sequence is present in this area which is proven in Kohat Plateau, to have active

petroleum system containing all the essential components for the generation and accumulation of hydrocarbons.

Source

In Abbotabad Block numerous source horizons are present which include Infra-Cambrian, Paleozoic, Jurassic (Datta Formation), Cretaceous (Chichali Formation) and Paleocene (Patala Formation). The geothermal gradient is 2.75 °C/100 m. According to the maturity model of Manzalai-1 located in Kohat Plateau, the Base of Datta Formation (Jurassic) had reached an oil window at 4000m in Miocene time. The Patala Formation from Panoba Village is thermally mature (Tmax 446 °C to 448 °C) and is in early oil window. The Rock-Eval Tmax of Chichali Formation is 439 °C to 446 °C displaying the presence of sediments of Chichali Formation in early oil window in the Chanda Field.

Reservoir

The proven reservoirs in the Kohat Plateau include Cambrian Sandstones, Permian Tillites (Tobra Formation), Datta Formation (Jurassic), Hangu and Lockhart Formations (Paleocene), Sakesar and Chorgali Formations (Eocene).

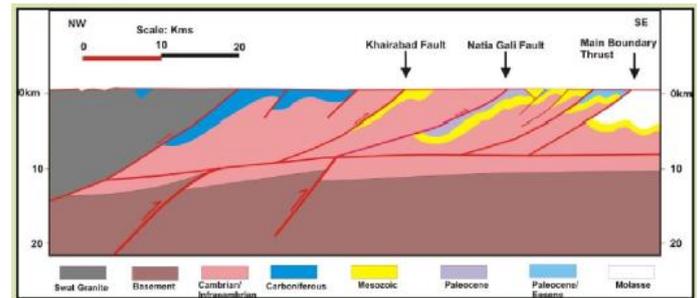
Seal

The proven cap rocks in potwar area include the interbedded shale's of the Cambrian, Permian, Jurassic (Datta Formation), Cretaceous (Chichali Formation) and Eocene (Kuldana Formation). It is quite possible that these rocks may act as cap rocks in the Abbottabad area.

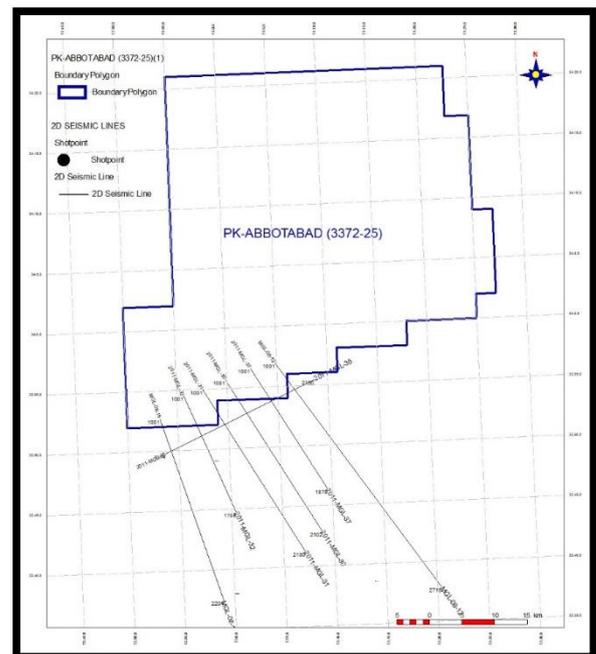
Trap

The block area comprises of faulted anticlines which may provide trapping mechanism for the accumulation of hydrocarbons.

Trapping Mechanism



Abbotabad Block Base Map



Well Data

Well is not drilled in this block.

Seismic Data

Few extended seismic lines are available within Abbotabad E.L.

2D SEISMIC DATA	3D SEISMIC DATA
Line km = 195.85	3D data is not available