

## **Stratigraphic Correlation and Isopach Maps of Punjab Platform in Middle Indus Basin, Pakistan**

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Punjab Platform is the eastern part of Middle Indus Basin in Pakistan with Sulaiman depression and fold belt in the west, Sargodha High in North and Pokhran High in the South. Subsurface geological reports and stratigraphic correlation of 19 onshore exploration wells of Punjab Platform completed by previous workers are incorporated in this paper to construction regional stratigraphic profiles and the isopach maps of prospective formations. During the Paleocene age, deposition center was located in southeast zone of Punjab Platform and thickness of strata increased from west to east. In Middle to Late Cretaceous age, deposition center was located in southeast zone and thickness of strata increased from 200 m in the northeast to 1350m in the southwest. In Early Cretaceous, thickness of strata increased from 20m in the West to 170m in the East. In Jurassic age, deposition center was located in southwest and the thickness of strata increased from 10m in northeast to 290m in southwest. In Early Cambrian age the deposition center was located in eastern side of Punjab Platform and the thickness of strata increased from 40m in the West to 800m in the East. In Infra-Cambrian age, the deposition center was located in southeast zone of Punjab Platform and thickness of strata increased from 530m in the West to 1130m in the East. The locations of deposition centers for Ranikot (Paleocene) Khewra Sandstone (Cambrian) and Salt Range formation (Infra-Cambrian) is similar which is southeast and the direction of sediments was from northwest to southeast.

Khewra Sandstone formation is a proved reservoir in the Upper Indus basin however shows were present in Salt Range formation in Karampur-1 and Bijnot-1 wells with heavy oil which indicates a prospective zone in Punjab Platform of Middle Indus basin for exploration in the future.