The Petrographic Granulometric Studies of Early Permian Warchha Sandstone, Salt Range, Pakistan

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Abstract

The Petrographic studies of the early Permian Warchha Sandstone from east to west of the Salt Range were carried out on 60 selected samples to understand their petrography and depositional Environment. The sandstones are classified as arkoses to sub-arkoses and Litharenites to Sublitharenites. The petrography and the nature of the Warchha Sandstone are controlled by the function of the energy and gradient of river flow. The lithic arenite or feldspathic arenite is found towards the high energy and quartzite towards the low energy side. The petrographic studies reveal that Warchha Sandstone could be good reservoir rock in the subsurface. In addition to this, the measured sections were correlated with different outcrops of fluvial depositional setting and similarities between such systems and their architecture elements in the subsurface were discussed.

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