

## **Source rock Potential of the Eocene Clastic Sequences in the Eastern Salin Sub-Basin, Central Myanmar: Implication for Future Exploration Potential**

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### **ABSTRACT**

The petroleum system of the onshore Central Myanmar Basin is generally characterized by the Eocene – Miocene fluvio-deltaic to marginal marine source rocks from north to south, i.e. Salin to Pyay sub-basins. The expelled hydrocarbons from the source rocks is migrated and trapped in the Eocene-Miocene clastic reservoirs (minor carbonates) in the NW-SE trending thrust anticlinal structures. The geochemical characteristics of the oils/seeps within the Salin Sub-Basin have long been identified as a single genetic oil family (e.g. Curiale et al., 1994). This article is focused on the effectiveness of the Eocene Yaw and Pondaung source rocks in the petroleum system of eastern Salin Sub-Basin. It is an isolated thrust-related synclinal structure, separated to the west by the relatively older Yenangyat-Chauk Thrust Belt (first line of structure) and the younger Ngashandaung-Gwegyo- Tunyintaung Thrust Belt to the east (second line of structure). These structures are progressively formed during the Late Miocene to Plio-Pleistocene tectonic inversion periods (Pivnik et al., 1998), related to the hyper-oblique convergence of India with respect to SEA (i.e. West Burma Plate). However, the previous exploration drilling campaign of 2015 in the eastern Salin Sub-Basin (i.e. blocks RSF 2 & 3), targeted to explore the hydrocarbon prospectivity in the sub-thrust portion of the Eocene Yaw and Pondaung formations, has concluded with minor hydrocarbon shows in the both Eocene intervals.