

Prospects Identification and Future Exploration Strategy in Palaeocene/Eocene Formations of Basement High and Adjoining Areas in Upper Assam Basin Based on Palaeoenvironment.

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Identification of loci for hydrocarbon entrapment based on depositional environment is a well known technique in hydrocarbon exploration. Environment has direct impact on shape, size and type of trap available in a particular area. Eocene- Palaeocene sediments (LK+Th and Langpar formation) in Basement High area of the Upper Assam Basin were deposited in shallow marine to fluvial condition and considered as most potential sediments for hydrocarbon accumulation point of view. More than 15 geological structures have been successfully explored in the Basement High and its adjoining area so far, with commercial production of hydrocarbon (Fig1).However, reservoir quality, extent and productivity vary from place to place. The primary reason could be the depositional setting of the reservoir units. An attempt has been made to identify trap type in the present study, likely to be available in OIL,s operational area as a guide for future exploration.