

Understanding Carbonate Heterogeneity for Effective Exploration and Development of Carbonate Plays in Myanmar

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ABSTRACT

High uncertainty in hydrocarbon potential and geological risk is the characteristic of carbonate plays in Myanmar. In one hand, the giant offshore carbonate Yadana Field discovered in 1969 at West Moattama is the largest gas field with about 6.5 TCF of reserves, contributing about one third of the gas production of Myanmar. Carbonate rock has been found in all tectonic provinces of Myanmar, from the Rakhine foredeep at west end to the Shan Plateau of Eurasia Plate in the east (Myint, 2016), suggesting great potential with carbonate plays. In the other hand, there is only one other carbonate field, the suspended onshore Htantabin oil field in Pyay Embayment, suggesting low potential and high risk. Through review on available data of Myanmar carbonate plays, in conjunction with our updated knowledge on worldwide carbonate, we understand that the high uncertainty in potential and risk comes mainly due to the limited knowledge and approaches on the carbonate heterogeneity. Therefore, an insightful understanding on carbonate heterogeneity is required for effective exploration and development of carbonate plays in Myanmar.