Exciting Evolution: Myanmar's Petroleum Systems, Plays and Field Developments

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ABSTRACT

The Pyalo Field lies within the north of the Pyay Embayment Sub-Basin, in the center of the Central Burma Basin (CBB). The structure corresponds to a NNW-SSE faulted and thrusted anticline formed during the Miocene. It was discovered in 1969, and 24 wells were drilled, mostly based on surface geology, for a total production of 9.6 Bcf of gas and 35,000 bbl of oil which ended in 1988. Most wells pre-date seismic data (acquired between 1977 and 1996) and the wells drilled subsequently were not optimally positioned due to very sparse seismic coverage and the then poor data quality (analog data or digital data with low fold and short spreads). Even the seismic acquired in 1989-1996 did not allow clear understanding of the Pyalo structure. For these reasons, Geopetrol International Holding (GPIH) who acquired with its partner A-1 Mining Company Limited the acreage in 2012, required a new subsurface image to assess potential undiscovered resources. As a result, two concepts were developed, one shallow based on appraisal potential of the Kyaukkok / Upper Pyawbwe reservoirs in the sub-thrust / anticlinal flank, and another, based on exploration of a deeper reservoir: the Okhmintaung Formation.