

## SEISMIC STRATIGRAPHY OF THE BAONG AND KEUTAPANG FORMATIONS, NORTH SUMATRA BASIN \*)

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### ABSTRACT

*Examination of recently acquired seismic data in conjunction with data from boreholes in Pertamina Unit I area, North Sumatra has revealed inconsistencies in stratigraphic nomenclature. Sequences presently called Middle Baong Sandstone are broadly time equivalent to, and contiguous with the lower parts of the Keutapang sequence in the south of the area.*

*By identifying sequence boundaries on the seismic, a complex facies boundary which is responsible for these inconsistencies in nomenclature can be mapped, running from the Telaga field southeast towards the Pantai Pakam boreholes. This boundary marks the division between the dominantly deltaic sequences of the Keutapang to the south and the marine Upper Baong Shale to the north. Four separate phases of delta progradation can be identified with source directions ranging from SW to S. Sequences encountered in boreholes either side of this facies boundary have been correlated using the seismic as a guide. The Middle Baong Sandstone appears to be a complex of several thin stratigraphic sequences, some deltaic in origin and related to the deltaic sequences to the south, while others are confined to the region to the north of this facies boundary and appear to be of different origin.*

*The implications of these findings for the geological evolution of the North Sumatra Basin and its hydrocarbon prospectivity are discussed and an alternative stratigraphic nomenclature proposed which should clarify relationships.*

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