Application of palynology to the stratigraphic study of Neogene Series, Offshore Sabah

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In the North East of Sabah, Aquitaine Petroleum Company - South East Asia - (SNEA (P)'s subsidiary) obtained a concession in the offshore of Dent Peninsula. Since 1970, six wells have been drilled in the Mio-Pliocene series which are essentially composed of terrigenous sediments (Ganduman and Sebahat formations) covered by carbonates (Togopi formation).

Palynological study was the best adapted technique for providing stratigraphical data on such sediments. After some difficulties in freeing the angiosperm pollens off the organic matter, an oxidizing chemical treatment was used to improve the palynological residue. From this adapted method, 157 types of angiosperm pollens, 15 types of spores, 3 types of disaccate pollens and 2 types of fresh water cysts were determined and enabled a range chart of 15 units to be established. With this palynological zonation, a correlation between the six wells was proposed and shows that the limits of the lithological formations do not correspond to the palynological units. This change can be interpreted as a sedimentological process of a prograding deltaic sequence.
