PERTEMUAN PERSATUAN (MEETINGS OF THE SOCIETY)

CERAMAH TEKNIK (TECHNICAL TALKS)

John B. Sangree: Exploration applications of sequence stratigraphy to lowstand deep-water sands

Laporan (Report)

Dr. John B. Sangree, consultant in sequence stratigraphy and president of Sangree Expl. Incorp., Houston USA, with more than 30 years of experience in the oil industry gave an interesting talk to about 20 members of our society at the Geology Department, University of Malaya on 9 August 1990.

In his talk on stratigraphic traps in deep-water sands, he presented studies on the two major potentials provided by such sands namely sequence stratigraphic traps and levee channel portions of slope-fan units. He described briefly the interplay between eustatic sea-level changes and subsidence rate variations and sediment supply rate variations as causes of stratigraphic cycles in basin fills.

Large volumes of often clean well-sorted sands are transported out to the deep water basin floor during lowstands and these make good reservoirs when sealed by the high-stand deposited clays which underlie and overlie them.

In his discussion on basin floor fans he gave the criteria for recognising the various types, mostly as mounds, on seismic and also discussed their variations in morphology and pointed out the pitfalls in interpretation caused by structures such as "turtle structures", slumped clinoforms, gravity slide-slump mounds and slope fan mounds.

He cited examples where oil has been successfully produced from often thin-bedded deep-water sands and suggested that greater efforts be expanded in looking for such traps or testing for them in wells which had already been drilled through such horizons enroute to thicker sands.

C.P. Lee