



POSTER PRESENTATION

Sources of Cenozoic Sediments around the Southern South China Sea

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The southern and western margins of the South China Sea include thick Oligocene to Miocene sedimentary successions that are of major hydrocarbon interest. Provenance studies, particularly using heavy minerals and detrital zircons, have been conducted onshore and offshore of SE Vietnam and NW Borneo that allow identification and characterisation of source regions. Sandstones analysed have characteristic detrital zircon age populations that suggest different blocks were sources for these sediments. Three distinctive populations have been identified: (1) Cretaceous zircons derived from igneous sources in SE Vietnam and SW Borneo, (2) Permian-Triassic, c. 1.8 Ga and 2.5 Ga zircons which are related to the East Malaya – Indochina block, and (3) c. 500 Ma, 800 Ma and 1.2 Ga zircons, suggesting a Sibumasu / Tin Belt contribution. These studies allow assessment of previously untested suggestions of sediment provenance, they enable reconstruction of sediment pathways, and provide further understanding of the sedimentary history of the South China Sea margins and development of drainage patterns on land.