

CERAMAH TEKNIK TECHNICAL TALK

Hydrothermal Alteration of Cambro-Ordovician Carbonates of North America and Relevance to the Carbonates of SE Asia

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25 March 2015

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Dr Richard Bray, a SE Asian carbonate reservoir consultant, and formerly a carbonate expert at PETRONAS Carigali presented the talk at the Mineralogy Laboratory of the Department of Geology, University of Malaya. The talk was attended by faculties and graduate students of the Geology Department and geologists from the industry.

Abstract: Hydrothermal carbonate rocks have a wide distribution in time and space. Nevertheless hydrothermal dolomite reservoirs are most commonly represented in North America. Hydrothermal alteration often is not recognized, distinguished or even considered in many hydrocarbon provinces worldwide. In this presentation, core and outcrop studies of carbonate rocks in North America identify discrete intervals of hydrothermal alteration with characteristic petrologic, petrographic and geochemical signatures. Hydrothermal alteration often overprints on a karst template and multiple episodes of karstic and hydrothermal events obscures the precise origin or origins of observed fabrics. The North American examples provide a guide and analogue for similar features distinguished in Paleozoic and Tertiary rocks on the surface and in the subsurface of Southeast Asia.