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## Timing of the Shan-Thai – Indochina Collision : New Evidence from the Pak Lay Foldbelt of the Lao P.D.R.

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## POSTER ABSTRACT

The Pak Lay Foldbelt of western Lao has generally been interpreted as having been formed during the Indosinian Orogeny, which occurred during the Permian or Triassic as the Shan-Thai Block collided and sutured with the Indochina Block. The stratigraphic sequence in this belt was regarded as consisting of a thick sequence of Upper Palaeozoic sediments with associated Lower Permian to Middle Triassic volcanic rocks, overlain unconformably by the non-marine Mesozoic Khorat Group spanning the Jurassic and Cretaceous periods.

Recent field work, sampling and analysis of specimens from the western part of Monument Resources petroleum exploration concession in the Lao PDR indicate that the pre-Khorat Group sequence includes volcanic rocks which are radiometrically dated from Triassic to Late Jurassic in age, and siltstones and shales which are palynologically dated as Middle to Late Jurassic.

The pre-Khorat Group rocks are strongly folded in the region West of Muang Kenthao where the Jurassic siltstones would be more or less vertical if the westerly dipping unconformably overlying Khorat Group was brought back to horizontal.

This suggests that the main tectonic event of the Indosinian Orogeny occurred in the Late Jurassic. Such a conclusion supports recent revisions of Khorat Group stratigraphy, which show the Group to be entirely Cretaceous in age, but it brings into question the current thermal subsidence model for its basin formation.