

A PROBABLE TECTONIC OVERTHRUST IN SELANGOR

H.D. Tjia, Dept. of Geology, Universiti Kebangsaan Malaysia, Bangi, Selangor.

Until now, lateral tectonic transport in Peninsular Malaysia has been deduced from overturned to recumbent folds and from reverse faults to moderately angled (10 - 30 degrees dip) faults. Low-angled (less than 10 degrees dip) thrusts or overthrusts have also been reported but consist of only single breaks or narrow shear zones and have been traced over limited distances. Their limited extent and the narrowness of the shears could be used as indicators that the said structures only represent local deformation and might have been the result of non-tectonic or only partially tectonic events (syndimentary slumping, detachment faulting). Their limited traceable extent is very probably inherent to the outcrop size and the low dips of the thrust planes.

This note records thick mylonite underlying a systematically undulating, generally very gently dipping fault surface that is exposed in two opposite roadcuts near Kampung Teras Jernang near Bangi, Selangor (Fig. 1).

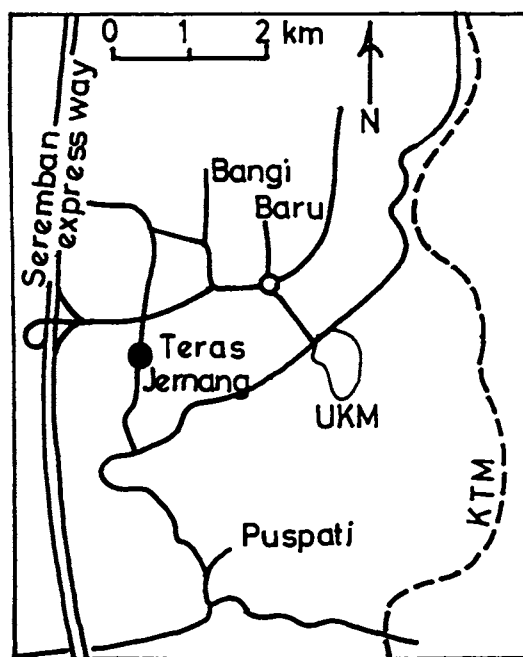


Fig. 1.

Locality map. Roadcuts in Figure 2 are located at the solid circle.

Figure 2 shows the two roadcuts; the upper cut representing the reversed section on the east side of the road, the lower cut showing the true section of the west side. Essentially three fault groups can be distinguished. On the lower road section is shown fault 260/27 (strikes 260 and dips 27 degrees towards north). It is straight and occurs within the thick mylonite to be described later. This structure is probably a reverse fault as the outcrop suggests, but no real indication of movement could be determined. The second group is represented by three faults in the upper road section, with attitudes 50/46 and 50/52. They form the border and also cut into a patch of weathered rock that may have been schist or metasandstone. Apart from their cross-cutting relationship with the main fault zone, no clear indications of motion sense could be determined along the three faults.