

A Microtektite Horizon in the Miocene Cruse Formation of Southern Trinidad

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Abstract

The Late Miocene Lower Cruse Member of the Cruse Formation on the Quinam Bay foreshore was sampled at 50 cm intervals and the samples numbered Qu-1 through Qu-23 from the top of the outcrop down. They were washed over a 63- μm mesh. Sample Qu-10 yielded 31 microtektites. These lacked micro-craters but showed a welded structure from accretionary impacts resulting from low-velocity collisions. These features, together with the low number of microtektites recovered, support a distal location relative to the impact crater. Four Miocene microtektite layers are known worldwide. Due to the lack of age diagnostic fossils in the Lower Cruse Member, it is not at present possible to say to which layer these microtektites belong. Nevertheless, they should be useful for at least local correlation, microtektite layers being chronostratigraphic horizons.