

**D-18 : SEDIMENTOLOGICAL AND MINERALOGICAL STUDIES OF  
SOME CLAY-SAND SUCCESSIONS OF WEUDA,  
NORTHWESTERN SRI LANKA**

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Field studies, granulometric and clay mineral analyses were conducted for some selected sediment samples from clay-sand sequences of Permo-Triassic age from Weuda area.

The morphology of the area and sedimentological features seem to have resulted from glacial activity. Several clay-rich horizons were recognized in the weathering profiles of the area. Representative fine grained (clay size) samples from these were collected and studied using Differential Thermal Analysis (DTA) and X-ray diffractometry (XRD). The results show that the clay minerals of the area are kaolinite and some species of montmorillonite group such as nontronite, volkonskoite and montmorillonite. The occurrences of nontronite and volkonskoite indicate the glacial origin of these clays.

The results of granulometric and statistical studies of the coarser sandy sediments of the study area also confirm the earlier finding that they have derived from glacial till and outwash deposits.