

UNPUBLISHED REPORT 1964/11

Descriptions of thin sections of Ferntree Formation rocks from drill cores at Risdon Brook

by M. J. Longman

The following descriptions apply to thin sections of Ferntree Formation rocks from drill cores at Risdon Brook:

The rock is siltstone containing minor beds of fine sandstone and limestone. Within the sandstone and limestone beds, the siltstone occurs as contorted wisps. Bedding is outlined by limonite and no grading was seen.

The siltstone is composed of angular to subangular fragments, averaging 0.02 mm and rarely reaching 0.4 mm in size of quartz with minor quartzite, plagioclase, microcline, granophyre, quartz-plagioclase-microcline intergrowths, muscovite and biotite enclosed in a matrix of fine quartz 0.005 mm to less than 0.001 mm in size.

The sandstone beds are similar, but composed of fragments 2.0 mm to 0.05 mm in size enclosed in a matrix similar to the siltstone. Siltstone also rarely occurs as subrounded to rounded fragments in these beds.

The limestone is composed of a recrystallised calcite mosaic of crystals 0.1 to 0.3 mm in size containing small siltstone lenses. With increasing siltstone content these beds grade into normal siltstone containing rare calcite fragments and lenses.

Secondary quartz occurs as veins and overgrowths on quartz fragments and pyrite is an accessory in all rock types.

[16 June 1964]