

Petrological descriptions of specimens collected at Risdon Brook dam site

by G. B. Everard

The following petrological descriptions are of specimens collected by Senior Geologist I.B. Jennings at Risdon Brook dam site.

64-222 The hand specimen is a weathered, rounded fragment of a fine grained greenish rock. Uneven weathering has resulted in prominent small green patches of less weathered pyroxene about 1 mm across on a more weathered, greenish yellow background.

In thin section the texture is subophitic, the rock consisting of reticulate fine lathlike and acicular crystals of feldspar, showing lamellar twinning interspersed with irregular crystals of pyroxene which partly enclose the feldspar crystals. Crystallization of these two constituent minerals was simultaneous. There are also minute scattered grains of opaque white clay minerals and opaque black magnetite.

In the interstices between the feldspar crystals, a little colourless glass is present and may contain crystallites.

The rock is a basic dyke of tholeiitic type and possibly of Jurassic age.

64-223 In hand specimen the rock is a pale grey medium to fine grained sandstone, with streaks and patches of dark organic material.

In thin section the rock is a mosaic of angular quartz grains from 0.05 mm to 1 mm across and averaging 0.2 mm. The larger quartz grains are cracked and show undulose extinction. A little feldspar is also present mainly as larger grains showing twinning. Rock fragments of fine grained siliceous rocks are common, and there are also rare flakes of white mica and rounded grains of zircon. Interstitial material consists of fine grained quartz and sericite discoloured by dark carbonaceous material, which also obscures some of the rock fragments.

The rock is a sub-greywacke.

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