

## Descriptions of rock specimens collected by geologist R. Jack

by G. B. Everard

The following are descriptions of rock specimens collected by geologist R. Jack.

### **Locality: Fraser River borehole, line Z 700'E, 99'–102'**

The hand specimen is a medium to fine grained crystalline rock made up of small areas of light green and dark green and showing cleavage faces of felspar crystals.

In thin section the texture is partly sub-ophitic and partly intergranular. Laths of plagioclase about 2 mm long terminate in green ferromagnesium minerals which also fill interstices between the laths. Ilmenite, partly altered to leucoxene, forms plentiful crystals of somewhat skeletal habit. Apatite is a plentiful auxiliary mineral in acicular crystals which may be of relatively considerable length.

The felspar shows simple, lamellar and Baveno twinning and belongs to the andesine range. A little oligoclase is also present in equidimensional crystals with a slightly higher birefringence.

The principal ferromagnesian mineral is chlorite after hornblende, and some greenish hornblende is also present but the ferromagnesians occur mainly as fine grained complexes of chlorite, clinozoisite, epidote and anthophyllite.

Some quartz is present in rounded grains.

The rock is a metamorphosed basic dyke.

### **Locality: Hampshire Iron Ore D.D.H. No. 1, 188'**

In this section the rock is coarse to medium grained and hypidiomorphic in texture. The principal minerals are quartz and felspar and there is a minor amount of indefinite chloritic material, scattered through the section.

The felspars include orthoclase and oligoclase. Both kinds are extensively altered and have a pinkish colour. The plagioclase is rather less altered and present in much smaller amount, and the crystals are smaller, tending to be euhedral and partly enclosed by orthoclase showing that they crystallised earlier. Simple, lamellar and Baveno twinning are present. The orthoclase may show simple twinning. Zoning is absent.

Quartz occurs as irregular grains, but occasionally crystal faces are present. It also occurs as inclusions in the felspars and interstitially.

A little biotite occurs, but it has been largely altered to a very dark green chlorite, occurring in ragged patches, sometimes as inclusions in the felspars. A little epidote also occurs as irregular inclusions.

The rock is a granite.

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