

The clinopyroxene is a slightly pinkish-green colour and is probably titaniferous augite. The greater part is unaltered, though there is rare corrosion by the mesostasis material.

The mesostasis material is very like the material replacing the phenocrysts. It is typically greenish-brown and fine-grained and occurs interstitially between the pyroxene and plagioclase. It has undoubtedly replaced primary volcanic glass.

Two small amygdales are filled with ?quartz (or feldspar).

Primary opaques are irregular in shape and granular.

This is a moderately fresh basaltic rock. The mineralogy, texture and degree of alteration are reminiscent of the basalts found on the outskirts of Melbourne.

Sample: 5060-5400' C : TS C8583

Location:

Duroon-1

Rock Name:

Porphyritic 'olivine' basalt

Hand Specimen:

A medium-grained speckled grey and black igneous rock.

Thin Section:

This rock is so similar to No. B that only the points of difference will be discussed.

The rock has been a porphyritic basalt with phenocrysts of olivine, set in a subophitic-textured mixture of plagioclase, clinopyroxene and opaques.

Specimen C contains larger phenocrysts of replaced olivine than B and the outlines of the replaced crystals are better preserved than in B. Replacement of the phenocrysts is by brown "iddingsite" at the rims with development of light brown clay in the cores. There are no xenocrysts of plagioclase.

Much more of the mesostasis appear to be composed of clay in this specimen. In one small area the mesostasis contains bright red, non-pleochroic fans of a phyllosilicate mineral. Sample C contains probably rather less plagioclase than B and is slightly more altered.

In other respects the rocks are very similar and it is consistent that they are from spatially close parts of the same igneous body.