

Description of a rock sample from the Cygnet area

by G. B. Everard

Sample 66B-187: Lymington Jetty, Cygnet (4966 yE, 6835 yN)

The hand specimen, collected by geologist D. Leaman, is a faintly purplish, fine-grained grey rock with phenocrysts up to 3 or 4 mm long of honey-coloured garnet and colourless transparent feldspar. A little pyrite is widely disseminated in small crystalline aggregates, often associated with the garnet.

In thin section the rock has a trachytic texture, consisting of a mass of albite laths averaging about 3 mm long and showing flow, together with minute ragged flakes of biotite, and granular epidote. There are occasional irregular scattered masses of magnetite, partly altered to hematite. Minute aggregates of pyrite also occur.

The garnet phenocrysts are almost colourless, irregular, incompletely isotropic and zoned. They have inclusions of epidote, feldspar, magnetite and a green biotite.

The feldspar phenocrysts are euhedral and lath-like, but the edges are slightly rounded and irregular showing resorption or alternation. Some crystals show zoning, with a core of albite, then oligoclase andesine, followed by a final selvage of albite.

There are also larger irregular plates of biotite.

The rock is a garnetiferous trachyte.

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