

## REPORT CMS 79/12/20

Petrological Descriptions29904

(T.S. 30303) K-stain positive.

5367 000N  
376 360 E

sttt

This is a fairly typical granophyre, i.e. a rock of essentially granitic composition with a micrographic (or micropegmatitic) groundmass. There is evidence that this rock represents a felsic differentiate of a more basic intrusive phase and this tends to confirm it as an extension of the quartz diorite.

Frequent weakly, but pervasively sericitised phenocrystal laths (300  $\mu$  - 1.2 mm) are present with a weak tendency to clustering and an incipient flow orientation. These are accompanied by sporadic, similarly clustered, marginally resorbed inverted beta quartz phenocrysts (mean 1 mm), and by occasional, completely chloritised, microphenocrystal "ferromags" (biotite + amphibole, mean 250-300  $\mu$ ). The groundmass consists of micropegmatitic quartz-albite intergrowths, interspersed with coarser subhedral albite laths (mean 150  $\mu$ ). Accessory K-feldspar is present along with frequent, partly leucoxenised grains of Ti-magnetite. The groundmass is weakly sericite- and chlorite-stained. The rock has been incipiently stressed and chlorite-muscovite veins occur sporadically.

Overall, the rock is of alkali granitic composition, but is relatively quartz-deficient (trend quartz-microsyenite). The abundant opaques (and microphenocrystal ferromags), however, suggest a basic to intermediate association.

As is typical in granophyres, phenocrysts tend to be mantled with micropegmatite. Thus, the feldspar is poorly resolved in hand specimen. The "rounded" quartz reflects partial resorption.

29905

(T.S. 30304) K-stain weakly positive.

5367 000N  
376, 350 N

sttt

This rock is clearly closely related to 29904 and can be classified as a porphyritic quartz microsyenite. In comparison, it is slightly deficient in quartz (largely restricted to the groundmass, sparse microphenocrysts) and carries a slight relative abundance of K-feldspar.

The fabric is essentially similar to 29904. In contrast, however, micropegmatite is only incipiently developed (a reflection of the deficiency in quartz) and glomerophenocrystal aggregates of albite laths are both relatively coarse and abundant. These features are sized up to 4 mm diameter and occur interspersed with finer-grained groundmass, thus causing the vague fragmental appearance in hand specimen.

Accessories comprise completely chloritised microphenocrystal ferromags and more or less completely leucoxenised Ti-magnetite. Sericitic alteration of feldspar is relatively marked and pervasive and incipient stress effects are evident.

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