

## BAVENITE FROM DRUSES IN THE BIOTITE GRANITE OF THE OSLO REGION

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Bavenite was first reported in Norway from a granite pegmatite at Boksjøen, near Aspedammen, Østfold (Neumann & Sverdrup 1959), where it occurs as a late hydrothermal alteration product of beryl. Later it was found in two granite pegmatites of the Iveland district, Høyland (near Frikstad and Birkeland), here too derived from the alteration of beryl (Sæbö 1967, personal communication). Thus it seems fair to assume that bavenite may be widespread as a deuteric mineral in beryl-bearing granite pegmatites.

This note records another mode of occurrence for bavenite in Norway, from a quarry in biotite granite (Drammen granite), the Konnerudveien quarry, situated just south of Drammen. It is found as a great rarity in the numerous pegmatitic druses of this rock, which is one of the youngest members of the Permian igneous rock complex of the Oslo Region.

Bavenite occurs as radiating clusters of white laths, each approximately 1 mm long, implanted on orthoclase crystals. The indices of refraction are:  $\alpha = 1.580$ ,  $\gamma = 1.590$ .

The following minerals were detected in the druses: orthoclase, albite, smoky quartz, titanite, epidote, chlorite, bavenite, laumontite, stilbite, chabazite, fluorite, magnetite. Bavenite was one of the latest minerals to crystallize. Chlorite and bavenite are younger than epidote.

Bavenite was originally described from pegmatitic druses in the Baveno granite, Italy, occurring on feldspar crystals with mica, epidote, and laumontite. Thus the mineral parageneses of the druses in the Drammen granite and the Baveno granite show great similarities.

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20th March 1968*

### REFERENCES

- ARTINI, E. 1901: Di una nuova specie minerale trovata nel granito di Baveno. *Atti (Rend.) Reale Accad. Lincei* 10, 139-145.
- NEUMANN, H. & SVERDRUP, T. L. 1959: Contributions to the mineralogy of Norway. No. 3. Bavenite from Boksjøen mineral mine, near Aspedammen in the county of Østfold. *Norsk Geol. Tidsskr.* 39, 339-342.