

The thin section contains symmetrical sections of analcrite phenocrysts up to 4 mm. in diameter, mostly between 2 mm. and 3 mm., and some as small as 0.5 mm. Cubic cleavage is well developed. These phenocrysts are evidently slightly altered and now show rounded and polygonal light buff areas surrounded by varying sized veins and patches of lighter coloured analcrite, the arrangement giving a variegated appearance to the mineral. The deeper buff patches are faintly but distinctly doubly refracting, and the veining is arranged in rectangular directions, suggesting slight alteration (perhaps recrystallization) governing the cleavage directions. Bordering parts of some phenocrysts show a distinct rim up to 0.05 mm. wide of clear, faintly doubly refracting analcrite. This rim is in some cases fastened directly to the phenocrysts, in other places being separated by a film of groundmass material; occasionally minerals of the groundmass project into the rim, so its outer boundary is in part gradational. This rim probably represents the groundmass stage of crystallization, during which analcrite from the groundmass was added to that already in phenocryst form.

The buff colour of the analcrite is due to numerous minute, dust-like inclusions, which are less numerous in the lighter veining and do not appear in the clear analcrite rims.

Some of the phenocrysts are broken, and the fragments are held in place by groundmass material.

Besides the analcrite, subordinate phenocrysts of aegirine, augite, orthoclase, titanite, and melanite are found.

Aegirite-augite occurs as idiomorphic tabular forms up to 1 mm. long, twinned in some cases, and quite fresh. It resembles aegirite-augites previously described.

Orthoclase is found sparingly as tabular crystals up to 0.6 mm. long. They show Carlsbad twinning, and are clear and unaltered. Along the sides, for a distance of 0.03 mm. inside the crystal are microlites of augite and apatite(?) orientated parallel to the sides of the crystal. They give the appearance of successive stages in crystal growth, and are probably analogous to the rims on the analcrite phenocrysts.

The melanite phenocrysts are about 0.3 mm. in diameter and are similar to the other occurrences of the mineral, exhibiting irregular cleavage, zonal banding, etc.