

Titanite occurs as typically lozenge shape and also tabular twinned crystals up to 0.75 mm. long.

The groundmass is very fine grained, and consists of laths of orthoclase, up to 0.1 mm. long, the larger showing Carlsbad twins. These laths are diversely or fluxionally arranged, often sub-parallel to the outlines of the phenocrysts, and make up about 40 per cent of the groundmass. Ægirite-augite, also about 40 per cent of the matrix, forms small, irregular grains up to 0.03 mm. and interstitial to the orthoclase. Analcite forms the major part of the remaining 20 per cent of the groundmass, in shapeless grains up to 0.03 mm. in diameter. The groundmass contains numerous microlites in the shape of colourless rods up to 0.2 mm. long, which are probably apatite. A measurement of the amount of analcite in this rock has not been made. It is estimated at about 60 per cent. Analyses of this rock are not available.

*Blairmorite, Other Varieties.* Besides the two distinct varieties of blairmorite just described, other specimens occur as fragments recognized only in thin section as analcite bearing rocks. They are all fine-grained rocks and may be portions from the matrix of porphyritic types, as A and B. The mineral associations are analcite, orthoclase (or sanidine) ægirite-augite, melanite, titanite, etc. No hand specimens of these rocks have been collected. It is to this variety of analcite trachyte that the name blairmorite was applied by Knight. The individuality of varieties A and B almost renders them worthy of distinctive names, but the rarity of the type, and their assured variation, in spite of their unique family resemblance, together with the vagueness of Knight's definition, decided the writer to adopt the name blairmorite for these analcite-bearing rocks.

Blairmorite may be redefined as a primary porphyritic volcanic rock, characterized by dominant phenocrysts of analcite in a matrix composed of analcite, alkali feldspar, and alkali-pyroxene, with titanite, melanite, and nephelite, not all of these groundmass minerals being necessarily present, and possibly others occurring. The rock on account of its ultra-alkaline nature will show numerous variations in texture and in proportions of component minerals, and the above definition has not been made more rigid on that account.