THE GEOLOGY OF SOME PEGMATITES NEAR GUMERACHA SOUTH AUSTRALIA

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ABSTRACT

Detailed mineralogical and petrological descriptions of the pegmatites are given, and a more generalized petrological description of the Adelaide System rocks enclosing the pegmatites. The tabular pegmatites are classified into three groups based on textural and mineralogical differences. Group 1 has a fibely crystalline margin containing quartz, albite and tourmaline, and a charsely crystalline core consisting of quartz, microcline and muscovite. Pegmatites of group 2 have a coarsely crystalline margin containing quartz, microcline, albite, muscovite, tourmaline and beryl, and a coarse core of quartz, microcline and muscovite. Group 3 pegmatites have no zoning and consist of quartz, feldspars and muscovite of variable crystal size. The irregular pegmatites show properties of all 3 groups. It is concluded that the pegmatites formed by infusion of fluids rather than by differentiation or replacement. A Geological map of the area is included.