

period of eruption (Gill, 1970). However, in rising from great depths and passing through maximum thickness of mantle [compared with stages (1) and (2)], there is greater scope for modification in the incompatible element composition (especially K) through processes involving wall-rock reaction, breakdown of phlogopite and the possible presence of an aqueous vapour phase (D.H. Green and Ringwood, 1967; Jakšs and White, 1969; Lambert and Wyllie, 1970). This stage of melting may produce the high K-calc-alkaline series (e.g. Jakšs and White, 1969; Jakšs and Smith, 1970).

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