A Mineralogical-Petrological Survey of Apollo 12 Sample 12013 Using Petrographic Microscope and Electron Microprobe Techniques

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Abstract

A mineralogical-petrological survey of Apollo 12 sample 12013 has been made with petrographic microscope and electron microprobe. The rock is extremely heterogeneous and consists of at least two separate fragmental units (light and dark) permeated by a once-fluid granitic component. The fragmental material includes a wide variety of lithic and crystal fragments some of which have not yet been reported from other lunar samples. The granitic component is essentially bimimalic, with dominant potassic feldspar plus silica.