Evidence for refilling of previously emptied basaltic pillows in the Hooggenoeg Complex, Barberton Greenstone Belt.

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Appendix



Fig. 2. Upper margin of a large pillow with a 16 cm thick flow-banded carapace containing large individual and impinging varioles along the outer side of the sharp contact with a massive, purplish black core. The edge of the pillow is visible in the upper part of the picture and the base of the core is just within the right margin of the photograph. Stratigraphic up is to the left. The matchbox is placed just within the upper margin of the pillow. The loosened block in the centre of the picture is one of the samples collected for analysis.



Fig. 3. The variolitic carapace of a large pillow with a band of impinging varioles along the sharp contact of the massive, aphanitic, purplish black core. Stratigraphic up is to the right. The matchbox is placed just within the contact of the core.



Fig. 4 a. Photomicrograph of metabasalt from the dark core of a large pillow showing a pseudomorph with a brown, bastite-like core and a margin of green actinolite, probably after a prismatic zoned pyroxene, within a matrix of spherulitic albite (after primary plagioclase). Scale bar is 500 μm. b. Detail of the feldspathic matrix in Fig. 4a, showing the skeletal albite, presumably preserving the shape of the original plagioclase. Scale bar is 200 μm.



Fig. 6. Cartoon illustrating the origin of pillows with distinctive cores in the stratigraphically uppermost part of the Hooggenoeg Complex as exposed along the Komati River in the Barberton Greenstone Belt: a. Eruption of submarine basalt with inhomogeneous lava flowing through tubular pillows towards the flow front; b. Drainage of lava partially empties some pillows leaving hollow, flow-banded shells whereas others solidify completely; c. The hollow pillows are refilled during eruption of a later massive flow, presumably from a crosscutting feeder dyke.