

*Interpretation:* This facies appears to consist of multiple sheet flows of andesitic lava separated by areas of andesitic hyaloclastite breccia facies (see below). Massive parts of flows tend to be, with the exception of some flows within DDH HAT-5, less than 10 metres thick. Complete individual flow units however are believed much thicker, commonly in excess of 10-15 metres, due to the bulk of the flows being made up of fragmental facies. Contacts between individual flows are often very hard to identify.

Perlitic fracturing within this facies, and within andesitic rocks of the Que River area has been noted previously by Whitford et. al. (1982), and more recently Corbett and Komyshan (1989). This style of fracturing results from the hydration of glass during cooling (Ross and Smith, 1955), and hence its presence within this facies testifies to the original glassy nature of the groundmass.

*Andesitic hyaloclastite Breccia facies (AHBf):* The most dominant facies in the Feldspar Phyric Sequence within the whole of the Que - Hellyer sequence is the andesitic hyaloclastite breccia facies. This facies is comprised of mid-dark green to buff coloured hyaloclastites and hyaloclastite breccias. Texturally the facies is very poorly sorted with fragments ranging in size from millimetres up to 10's centimetres. These fragments are typically angular with straight to weakly cusped margins. Internally the fragments are identical to the massive andesitic lava facies, being weakly vesicular and plagioclase phyric.

The framework of these hyaloclastites and hyaloclastite breccias vary from closed to open, with open framework varieties supported by very fine grained sand to mud sized sediment giving the rock a peperitic texture. The coarser, closed framework breccias vary from 'jigsaw' to non 'jigsaw' fit. Grainsize generally increases towards the contact of this facies with the massive andesitic lava facies. Commonly this facies lapilli sized (2-4 millimetres), grading over a metre or so to blocks in excess of 6 centimetres.

This facies is commonly found by itself or overlying the massive andesitic lava facies in gradational contact. In the vicinity of mineralisation at Hellyer this is the most common primary volcanic facies. Intense hydraulic