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SAMPLE NUMBER: 562656

SUMMARY: This is a texturally well-preserved bedded basaltic vitric tuff or fine-grained hyaloclastite.

HAND SPECIMEN:

This is a dark green-grey thinly bedded tuffaceous siltstone .

THIN SECTION:

This is a beautiful vitric tuff, composed almost entirely of silt-sized fragments of glass that have devitrified to chlorite and minor quartz. The glassy ash was composed largely of cusped shards up to about 0.2mm across, but are now replaced by pale green chlorite in which blebs of secondary quartz and leucoxene are set. The matrix between the former shards varies from bed to bed from about 20-50 modal% of the rock, and consists probably of devitrified finely comminuted glass that has altered to an irresolvable mixture of quartz, chlorite, feldspar(?) and tiny leucoxene grains that is riddled by sericite. A few narrow darker-coloured bands parallel to the bedding in the ash are thought to be stylolite-like concentrations of less soluble components in zones of stronger pressure solution. The relative abundance of chlorite in this sample suggests that the precursor was basaltic. It could be termed a vitric tuff, or a very fine-grained hyaloclastite.