

REPORT CMS 82/4/41

Five samples of diamond drill core were received for petrological examination, and results are compiled in the attached table. Descriptions incorporate data from K-feldspar and carbonate-staining tests and microscopic (stereobinocular, petrological) examination of representative thin-sections and offcuts.

Summary

The bulk of this suite comprises altered dacitic to rhyolitic volcanics, more or less characteristic of the Mount Read Volcanics. Primary textural features are partly obliterated, but the rocks in general appear to represent subaerial facies. A possible exception is the pelitic ash (35192) which is of subaerially-transported/subaqueously-deposited character.

Alteration features are rather consistent with sericite-quartz-albite-chlorite (+ epidote-calcite-pyrite) assemblages. Weak and non-penetrative regional metamorphic overprints approximate to sub- or low-greenschist facies, and there are no positive indications as to whether the bulk alteration effects are essentially volcanohydrothermal (and enhanced by the low-grade metamorphism), or strictly metamorphic. An exception is the rather patchy carbonation which is typically texturally late.

Sample 35191 is a strongly carbonaceous, dolomitic, low-grade metapelite with accessory syngenetic pyrite and sporadic films of sphalerite. The latter features post-date the weak slaty cleavage, but predate a weak late phase of calcite veining. Sphalerite is a deep red (moderate-Fe) variety and appears to reflect an essentially "Zeehan-style" mineralising phase.

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