

REPORT CMS 8277/21

Thirteen rock samples from Colebrook Hill were received for petrological examination. As the suite exhibits limited variations, brief descriptions were prepared in tabulated form. These incorporate data from microscopic (stereobinocular, petrological) examination of representative thin-sections and offcuts, and the results of carbonate staining tests, where applicable.

Summary

This suite consists entirely of contact-altered labile turbiditic sandstones and subordinate pelitic sediments which can be classified broadly as tuffaceous greywackes in recognition of their essentially entirely basic-intermediate volcanic framework components. General features are typical of the labile turbidites of the Crinson Creek Formation. Even relatively altered types (e.g. 45925) are recognisable by virtue of their conspicuous clastic opaques, a characteristic feature of this sequence.

Alteration is of low-grade contact-metamorphic character. Marginally, the alteration assemblage is chloritic. This grades into tremolite-actinolite ± phlogopite, with the Mg-mica reflecting Mg-metasomatism, at least in part. A few rocks exhibit late "retrograde" carbonate-chlorite alteration or, locally, quartz-chlorite veining with accessory schorl. Hornfelsic recrystallization effects are semi-pervasive, but generally mild.

There are analogies with the Renison wall rocks as described for example by Patterson et. al. (Econ. Geol. Vol. 76, 1981). Typically metasomatic effects slightly postdate the contact-metamorphic assemblage and tend to comprise Mg-silicates (e.g. tremolite, phlogopite, diopside, dravite). The distinction, however, may not be apparent in individual specimens.

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