

REPORT CMS 84/7/32

Ten rock samples from the Mount Black project were received for petrological examination. Representative thin-sections were prepared and examined together with the respective offcuts, with K-feldspar and carbonate staining tests performed as warranted. Attached tabulated descriptions summarise the microscopic data and include interpretative comments.

Summary

This suite exhibits a similar range of lithologies to that noted previously from this area (refer CMS 84/7/10).

Samples 62843 and 62846 represent thoroughly altered basic igneous rocks with affinities to 62824 of the previous suite.

Altered ultramafics are represented by samples 62865 and 62867 with affinities to 62828 and 62831 as previously described.

Sample 62863 is a thoroughly altered semi-chilled amygdaloidal phase with vague relict differentiated ultramafic characteristics enhanced by conspicuous fine relict primary chromite. This rock exhibits weak "ocellar" crystallization patterns and, whilst finer detail is obscured by alteration, this rock is conceivably a subaqueous extrusive with affinities to the minor ultramafic pyroclastics and scoriaceous breccia components of the Cambrian ultramafic complexes.

Samples 62856 and 62858 are texturally similar tuffaceous psammopelites of felsic intermediate character, and variously argillised (62856) or with a high content of clastic glass persisting as incipiently devitrified relics (62858). Textures are strictly psammopelitic rather than pyroclastic, with inferred subaqueous modes of deposition.

Sample 62861 is a soft-pebble conglomerate-like breccia composite of dolomitised impure limestone and quartzose sandstone components. A similar composite lithology is represented in 62843, where detail is obscured by tectonic brecciation effects.

A pyritic quartzite (62876), analogous to the previously described 62833 and 62835, is also represented.

Alteration features are generally similar to those previously noted, with igneous rocks variously sericite-chlorite-quartz-altered, or carbonated and silicified, and limestone components dolomitised. Sideritic carbonate veining and replacements appear relatively marked in this suite, and locally-associated Pb-sulphosalt disseminations enhance affinities with the similar patterns developed in the Zeehan- and Dundas situations.

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