

In contrast to the associated specimens, the clay fraction consists of essentially random kaolin-illite and near-isotropic chlorite in varying proportions, and this reflects a slightly different diagenetic/incipient metamorphic history. The essential absence of a slaty cleavage can be related to the pervasive chlorite which, typically, does not respond to re-orientation under sub-greenschist conditions.

Deformation is of typical semi-plastic to semi-brittle style, with deformed to microfractured bedding. Closely spaced, intersecting fractures are healed with films of carbonaceous matter. These show mutually crosscutting relationships with sporadic, discontinuous to semi-continuous veinlets (to  $500\mu$ ) of chlorite, ankeritic carbonate and accessory quartz.

This rock includes rare microscopic patches of pyrite of syngenetic character.

98081

MBD 41  
136.7m

(T.S. 32134)

This is a fine-grained carbonaceous dolomitic marble, essentially pure (that is, virtually entirely carbonate) and devoid of metasomatic alteration features.

The bulk of the area sectioned consists of granular, weakly interlocking dolomite-ankerite (mean  $50\mu$ ) with subtle variations in grain size defining relict sub- to millimetric scale bedding laminations. Coarser-grained carbonate occurs in mildly displacive, concordant to irregular discontinuous zones, representing diagenetic veins and cavity fillings. These show mutually crosscutting relationships with sporadic intersecting planar to stylolitic, microscopic films of carbonaceous matter.

Traces of quartz are present as rare corroded grains of authigenic character. This rock is locally crudely schistose, but typically has a granular, non-directed fabric.

98082

MBD 41  
136.0m

(T.S. 32135)

This is a fine-grained sericite-topaz-fluorite-sellaite rock and vague textural evidence indicates that it represents a brecciated and thoroughly greisenized carbonaceous pelite.

Irregular aggregates of random sericite are interspersed with extremely fine-grained topaz, typically with intergrown coarse poikilit or elsewhere microgranular fluorite. Irregular veinlets of sericite and fine (mean  $100\mu$ ) euhedral topaz occur sporadically. Sellaite is thinly disseminated throughout and occasional aggregates of pale phlogopite are interspersed with sericite. Dark red, semi-opaque sphalerite is common in single grains and spongy clots up to 1 mm diameter, and the rock is locally stained with fine to ultrafine green schorl.