

98084MBD 10  
100.5 m

(T.S. 32137)

This is a deformed and extensively metasomatised carbonaceous psammopelite. Relict features indicate a sub- to millimetric scale, planar to lenticular intercalation of silty shale and argillaceous quartzose siltstone with thin partings and sporadic semi-continuous, variably carbonaceous shale bands. The siltstone "grades" into fine sandy siltstone and, locally, silty fine sandstone. General features are closely analogous to, for example, 98074. In comparison, the clastic component is relatively siliceous (i.e. relatively abundant quartz).

A weak, but more or less penetrative, slaty cleavage is variably deformed by intersecting microfractures healed with films of carbonaceous matter. These features postdate an earlier (?diagenetic) phase of quartz veinlets with disseminated fine-grained pyrite.

The "shale" (sericite) component is variably replaced by fine to ultrafine tourmaline (very pale green schorl, minor dravite). This phase is of distinctly metasomatic character and appears to have developed more or less contemporaneously with the semi-plastic to semi-brittle deformation. Ankeritic carbonate is a minor accessory alteration phase, as late poikilitic aggregates and crude crosscutting films.

98085MBD 10  
104.1 m

(T.S. 32138)

This rock is a mildly altered carbonaceous protoquartzite and can be compared with the minor sand component in the carbonaceous pelites (e.g. 98074, 98084). The framework is incipiently bedded and poorly to moderately sorted in the silt to fine sand range and comprises largely angular to subangular quartz (approx. 80-85 %) with relatively minor, variably sericitised feldspar, thinly disseminated shale fragments (variably carbonaceous), accessory muscovite flakes and a sparse heavy mineral assemblage (leucocratic semi-opaques, tourmaline, rare zircon). The matrix/cement consists of overgrowth quartz and intergranular quartz-sericite aggregates. Carbonaceous matter is pervasive along grain boundaries and in the matrix.

Intersecting microfractures are healed with films of carbonaceous matter and these features are intersected by sporadic, discontinuous veinlets of quartz and ankeritic carbonate. The minor argillaceous cement component is incipiently impregnated and replaced by pale tourmaline (sim. 98084). Disseminated talc flakes and patchy, remobilised carbonaceous matter are accessories in the veins (to 2 mm). There is no detectable cassiterite.