

98074MBD 46  
222.6 m

(T.S. 32127)

This is an incipiently altered carbonaceous psammopelite with affinities to 98073. In comparison, this sediment is relatively carbonaceous and is distinctly turbidite-like with weakly graded bedding. The area sectioned comprises a laminated argillaceous siltstone, locally grading into silty shale and with sporadic bands of fine-grained sandstone. Clastic components are splintery to subangular quartz, sericitised feldspar and muscovite in varying proportions. Sandy bands carry clastic pelite (shale, silty shale, typically carbonaceous) and rare felsitic rhyolite clasts (volcanomict lithic protoquartzite). Splintery, sericitised clastic feldspar grains are considered as abraded, reworked shards in part, and the rock has a certain reworked tuffaceous character.

Carbonaceous matter is more or less pervasive and is partly reorganised into microscopic films in response to incipient metamorphism. Minor traces of "syngenetic" pyrite are present.

Alteration is incipient only, with patchy development of semi-continuous, concordant to crosscutting veinlets of near-isotropic Mg-chlorite with accessory ankeritic carbonate. Finer films of chlorite and remobilised carbonaceous matter locally displace bedding.

98075MBD 23  
38.80 m

(T.S. 32128)

This specimen can be classified as a phlogopite-sellaite rock and represents a greisen-type vein.

The fabric is random to crudely crustiform-banded in terms of the distribution of sellaite. Phlogopite is brownish-green in hand specimen, but colourless in thin-section and is generally extremely fine-grained and random, but with sporadic coarser flakes, rosettes and colloform-like "cross-fibre" zones. Sellaite occurs throughout in pale brown granules and clusters in irregular zones, sometimes in optical continuity with disseminated clear, an- to euhedral grains and clusters. The brownish variety evidently has a certain rare earth component and may be selvaged by incipient yellow pleochroic haloes in adjacent phlogopite.

Accessories include sparsely disseminated patches of anhedral quartz and pleochroic (blue to colourless) anhedral beryl (to 2 mm), which is typically intergrown with coarse sellaite and mantled with phlogopite rosettes. Trace constituents are apatite, fine-grained ankeritic carbonate, fluorite, thinly disseminated pyrrhotite and rare spongy aggregates (to 1 mm) of dark red (high Fe-) sphalerite. There is no detectable cassiterite.