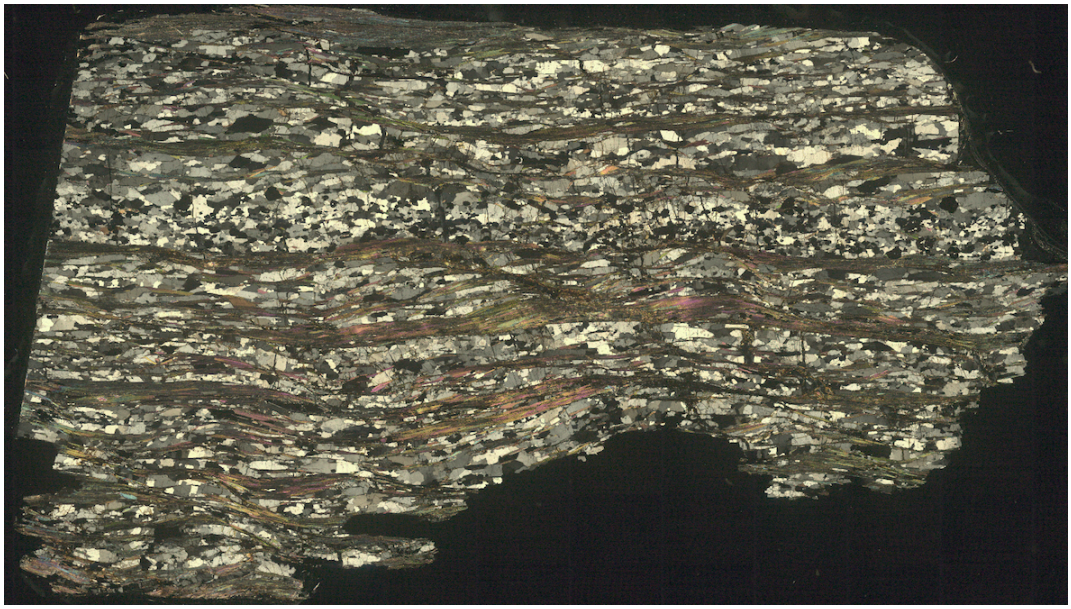
LG 09-50: field photographs, thin section photomicrographs, monazite chemical maps and laser-hole photographs

Note: The thin section photomicrographs are of the glass-covered thin sections and not the thick polished sections that are presented in the figures.

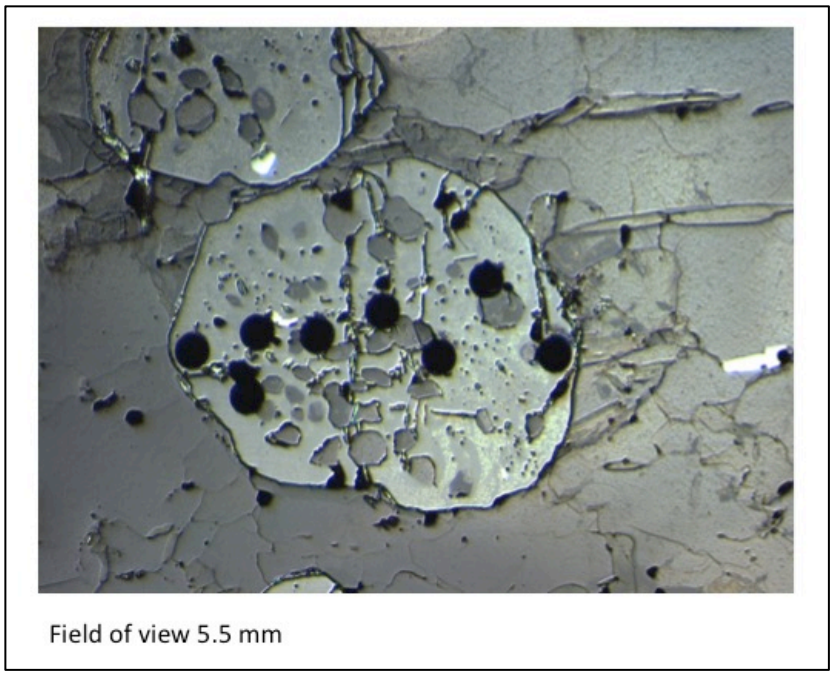
Field view of outcrop locality for LG-09-50. More massive, finger-grained metasediments form the lower part of the exposure; more layered and heterogeneous schists form the upper part. The vertical field of view is ~6m. Photo RRP.

More detailed view of locality LG-09-50 showing fine-grained nature of the sample. Small shear bands separating more quartzo-feldspathic layers are clearly visible. Photo LVG

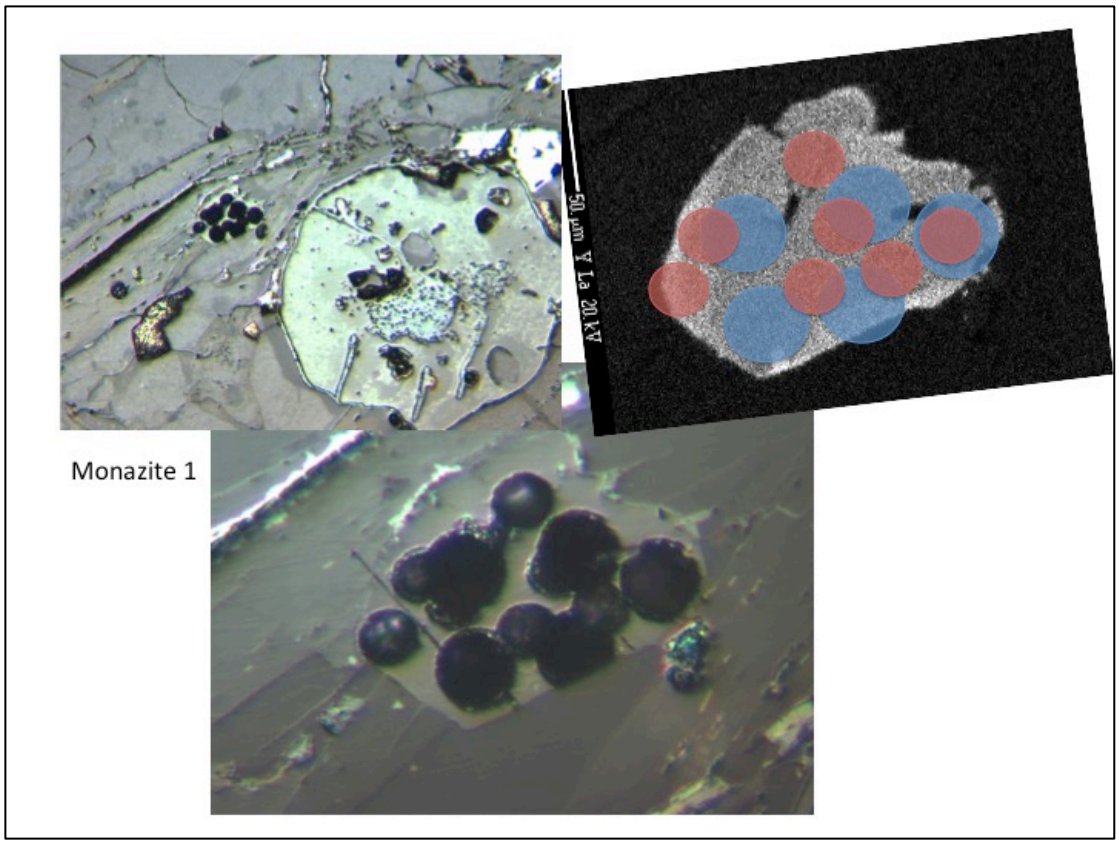

Thin section photomicrograph of LG-09-50 in plane polarised light. Section is ~ 2 cm wide x 1 cm high. Garnet is limited to the quartz-rich layer in the top third of the section. Micas form shear bands that pin the quartz and feldspar grain boundaries.



Thin section photomicrograph of LG-09-50 under crossed polars. Section is ~ 2 cm wide x 1 cm high.



Reflected light photomicrograph of garnet showing 60 μm laser pits for REE analyses.



Monazite 1 (Y map and reflected light photomicrograph) showing laser pit locations for U-Pb (15 µm; red) and REE (25 µm; blue) analyses.