

PROJECTS RELATED TO OTHER COMMODITIES

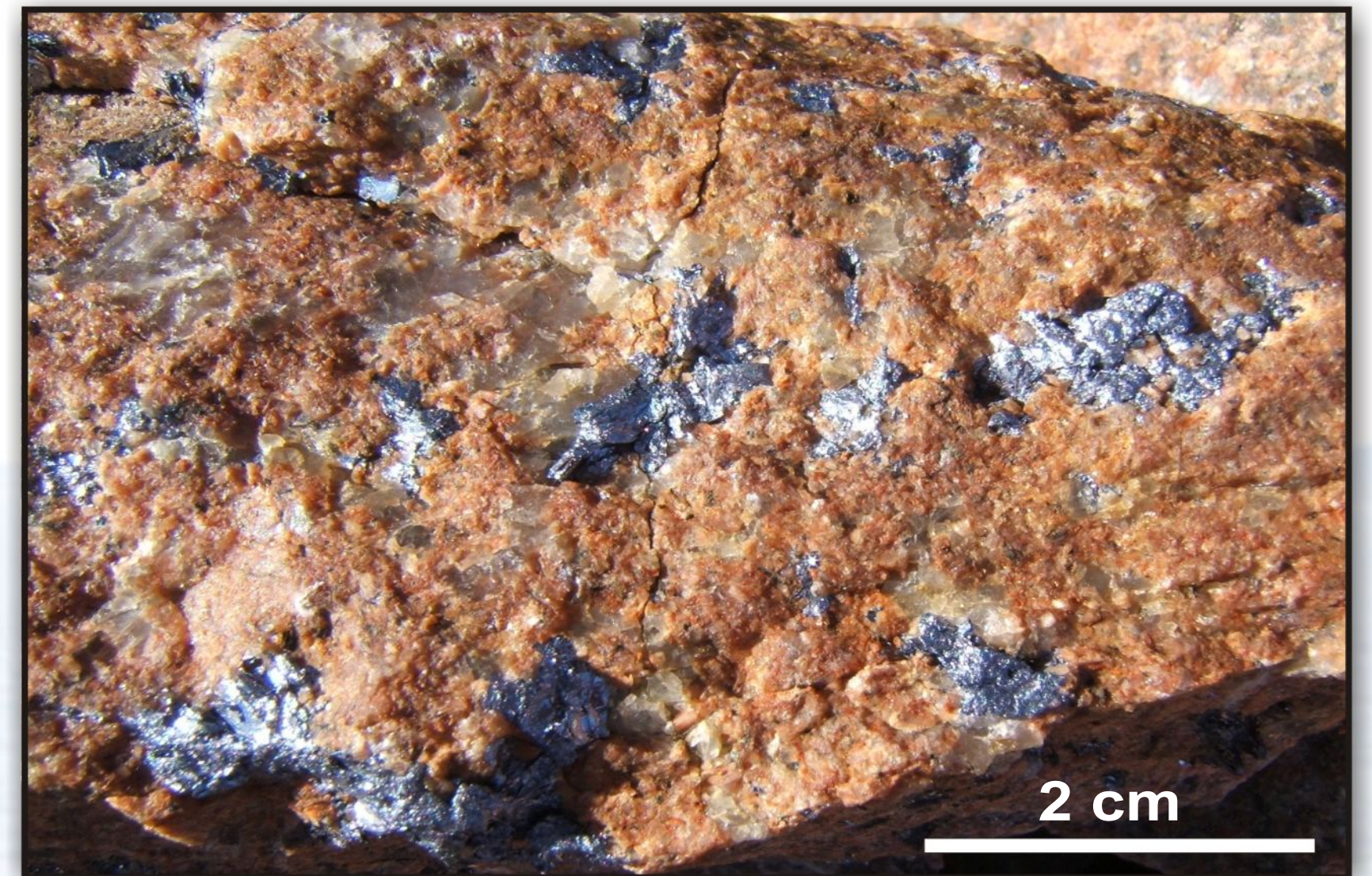
In 2009, other projects included continued work on Mo-W mineralization in southern Newfoundland, continued appraisal of the potential for potash in western

Newfoundland, and compilation of data on rare-metal mineralization (Zr-Y-Nb-Be-REE) in the Province.

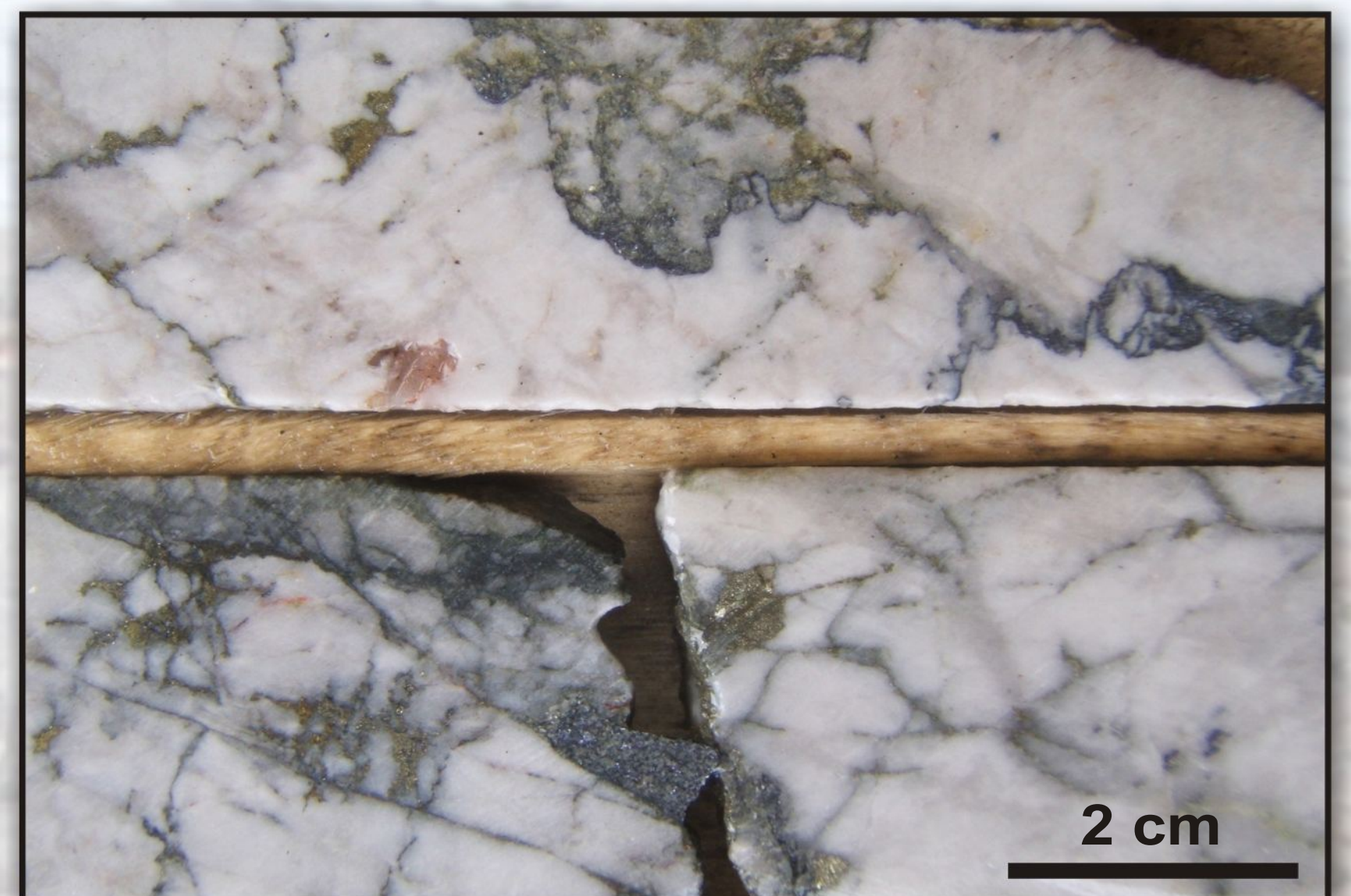
Molybdenum Mineralization in Southwestern Newfoundland

Molybdenite has long been known on the south coast of Newfoundland, notably in and around the Ackley Granite and near Grey River. Exploration by Tenajon Resources suggests that the Moly Brook deposit may have potential as a low-grade, bulk-tonnage molybdenum resource. Estimates suggest some 118 Mt at 0.063% Mo, and zones of near-surface mineralization remain untested. In the Granite Lake area, exploration in 2007 and 2008 by Playfair Mining defined mineralization in sheeted quartz veins over a wide area, with grades similar to those reported from Moly Brook. Examination of drill core from Granite Lake in 2009 suggests that the style of mineralization is very similar to Moly Brook, although the age of mineralization remains unknown.

Re-Os ages were obtained from Mo prospects in the Ackley Granite by E. Lynch and colleagues, indicating an age of 380 ± 2 Ma. U-Pb ages obtained from Mo-bearing granitic dykes at Moly Brook are closely similar at 378 ± 2 Ma. The data suggest an important middle to late Devonian episode of granophile mineralization, but more data are required. Work by GSNL in this project is coordinated with a Ph.D. research project by E. Lynch (University of Galway, Ireland) focused on mineralization, fluid inclusion studies and Re-Os geochronology.



Coarse-grained molybdenite, Ackley Granite



Molybdenite and chalcopyrite in quartz vein, Granite Lake

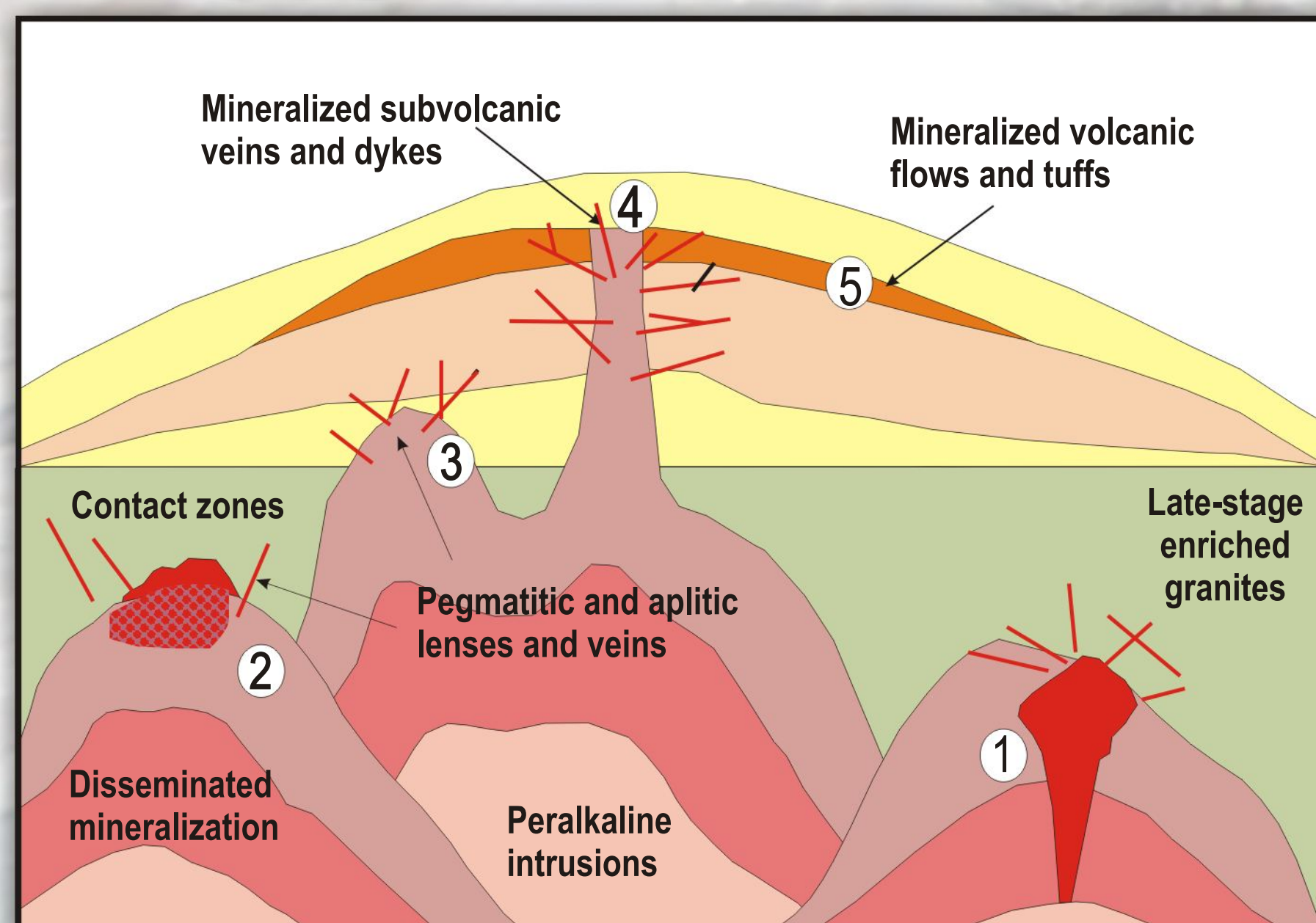


Mineralized granite with "exotic" REE minerals, Strange Lake

Rare Metals (Zr-Y-Nb-Be-REE) in Newfoundland and Labrador

Export quotas imposed by China have led to substantial price increases for rare-metals, including rare-earth elements (REE). Previous exploration for REE was restricted to Labrador. The Strange Lake deposit is a major (world-class) deposit of its type, but currently has EML status following its inclusion as part of Nunatsiavut. The deposit is located adjacent to Quebec, where exploration has identified similar mineralization. Rare-metal mineralization also occurs in the Flowers River Complex of northeastern Labrador.

Rare-metal and REE deposits are associated with peralkaline igneous suites. These occur in two areas of Labrador, but are abundant in Newfoundland, including suites of both late Precambrian and mid-Paleozoic age. REE mineralization is known in the Fortune Bay area of southern Newfoundland, and has also recently been discovered in western Newfoundland. The initial stage in a project aimed at further documentation of rare-metal and REE potential is the compilation of data from previous exploration and from survey work for a commodity series report.



Setting of rare-metal mineralization in peralkaline igneous suites