Mary Macquistan, University of British Columbia, Vancouver, BC, Canada, for her project: *The origin of exotic barium silicate minerals in the Cordillera: Characterization and comparison of the Gun occurrence (Yukon Territory) and localities in California*

Mary Macquistan is a M.Sc. student at the University of British Columbia working with Dr. Lee A. Groat. Her thesis focuses on the characterisation of rare barium silicate minerals, with particular emphasis on the Gun occurrence in Yukon Territory, Canada. Using thin section microscopy, mineral liberation analysis, and electron probe micro analysis, Mary is determining the paragenetic history of this rare mineral occurrence and the physical constraints under which it formed. The thesis will also compare samples from the Gun occurrence with those from Fresno County, California where there are several barium silicate type localities.

The Lipman Student Research Grant enables Mary to conduct field work in Fresno County, prepare thin sections, and complete an in-depth characterisation on a selection of her thin sections using a scanning electron microscope and electron microprobe. This support funds a detailed comparison of the Gun occurrence with samples from Fresno County sites.

Mary grew up in Ottawa, Ontario where she graduated from the University of Ottawa with a Bachelor of Science; Specialization in Geology, and a Minor in Mathematics. Upon graduating she began her research at UBC where she is pursuing her interest in mineralogy. Mary enjoys fieldwork and has already completed preliminary work on the Gun site. Her Masters research started in September of 2021. Outside school, Mary enjoys hiking, horseback riding, bouldering, and swing dancing.