

Feldspars, Amphiboles, and Sheet Silicates

The point of this lab is to refresh your memory of the appearance of the common rock forming feldspar and pyriboles in thin section.

Thin Sections:

II-007 – This section contains a great example of coarse perthite. Identify distinguishing characteristics of the two feldspars and sketch a perthite grain.

NE 82 (2 sections)- These sections contain Riebeckite and a single (now exsolved) feldspar. Notice the strong pleochroism in the riebeckite. Is the feldspar a perthite or antiperthite?

SC 34 – Plagioclase – Find several grains and determine the An content. What is the rock type?

SC 1 or I1- 016 – This section contains quartz as well as well as 2 coexisting feldspars. Identify the distinguishing characteristics of the 2 feldspars.

II-023 – This section contains myrmeckite. Find an example and sketch it.

SC 43 – Find two examples of Granophyric texture and sketch them.

84-3a and 84-6 These are thin sections of lavas from the San Juan volcanic field. 84-3a is a post-caldera rhyolite dome and 84-6 is Fish Canyon tuff. Phenocrysts include quartz, plagioclase and sanidine. Distinguish among these 3. develop a set of diagnostic characteristics for distinguishing among these three phases.