

**SAMPLE NUMBER: 431567**

**SUMMARY:**

This is a barite-sulphide vein composed of polygonal barite with diffuse bands of pyrite with interstitial galena; sphalerite is replacing both pyrite and galena; chalcopyrite is a minor opaque phase, probably being released during sphalerite replacement of galena and pyrite.

**HAND SPECIMEN:**

This is a grey rock composed of finely crystalline barite with diffuse bands of pyrite, and occasional patches of much coarser-grained barite.

**THIN SECTION:**

This sample consists almost entirely of medium-grained intergrown polygonal barite in which a few larger anhedral porphyroblasts of barite are preserved. Sulphides form several diffuse bands through the barite, and include a sphalerite band and several bands of abundant small pyrite grains with sparse intergrown barite. In reflected light, the pyrite grains are seen to be idiomorphic and up to several mm across. Some have narrow rims and veinlets in cracks of chalcopyrite, although this is modally insignificant. As pyrite in bands become less abundant or more diffuse, more galena and sphalerite occur interstitially to the pyrite. Chalcopyrite occurs in these minerals as small blobs and spots. As in the three other polished sections described herein, the sphalerite clearly post-dates and is overgrowing the galena, and to a much lesser extent, the pyrite.