

Figure 5.7. Lower Kittanning Shale (Sample LKFC-PA). Photomicrographs. *A*, Rock chip in plane-polarized light (PPL) at 2.5X. *B*, Subrounded quartz grains (0.1 millimeters across) in a fine-grained matrix mostly composed of mica, chlorite, and clay (20 X, PPL). *C*, Same view as *B*, in reflected light, shows scattered cubes of pyrite as well as framboids. *D*, High-magnification (50X) shows framboid texture, reflected light.

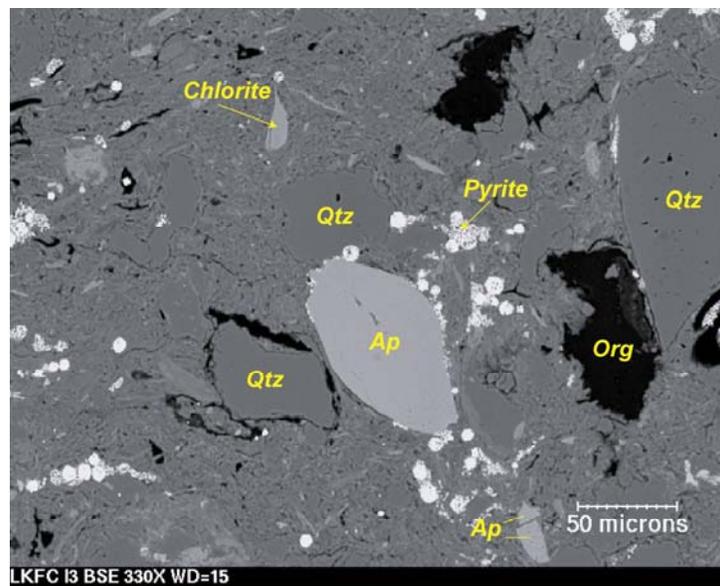


Figure 5.8. Lower Kittanning Shale (Sample LKFC-PA). SEM image showing coarse apatite rimmed by pyrite.