

from the gabbro by later fluids, rather than original introduction by those fluids. Zn is higher in the pegmatoids than in the gabbro. Li concentration is interesting because the wet analysis of the sodic amphibole (table 17) shows noticeable Li; most of the Li in the rock must be in the amphibole. Al-Shaieb (1979) showed that U is associated with the mafic phases and zircon, but he could not tell its exact form.

These rocks are the youngest in the area and are believed to be derived from the Quanah Granite.

Meers Quartzite

Metaquartzite has been found in two exposures: the SE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 8, T. 3 N., R. 15 W., and the NW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 4, T. 3 N., R. 15 W. The first of these is bounded by Mount Scott Granite on two sides, and probably on three, although not so clearly. The Post Oak Conglomerate overlies the quartzite and granite, bounding the upper surface. This is nearly pure quartzite, composed of partially reconstituted quartz grains, traces of metamorphic sillimanite and muscovite, and detrital zircon, apatite, rutile, and sphene (figs. 123, 124).

The second of these outcrops is surrounded by Sandy Creek Gabbro and is much smaller, exposed only in a prospect pit (NW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 4, T. 3 N., R. 15 W.). This outcrop is near the southeastern end of an earthen dam at a larger stock pond (in foreground of the aerial photograph, fig. 108). Sillimanite is quite prominent in some of these samples (W-977): 69.5 percent quartz, 18 percent sillimanite, 10.5 percent perthite, 0.25 percent plagioclase, 1.25 percent muscovite, 0.25 percent biotite, and 0.25 percent oxides (fig. 125).



Figure 123. Mount Scott Granite in foreground. Person is standing at contact with Meers, which caps the skyline. Post Oak Conglomerate overlies these two units beyond hill, out of sight.



Figure 124. Photomicrograph of quartzite from Mount Scott Granite, showing polygonal (recrystallized) quartz.



Figure 125. Photomicrograph of sillimanite-rich quartzite from Sandy Creek Gabbro. View 1.75 × 2.6 mm.