TABLE 13.—MAJOR FEATURES OF MEERS QUARTZITE AND TILLMAN METASEDIMENTARY GROUP

Meers Quartzite

Rock Type	Description
chlorite, mica quartzite	Subrounded quartz grains set in a matrix of muscovite (7%), biotite (6%), and chlorite (3%). Contains zircon (1%), plagioclase (1%), and traces of magnetite and micropegmatite.
pure quartzite	Nearly pure recrystallized quartz. Partly subrounded grains. Secondary overgrowths.
feldspathized quartzite	Variable amounts of perthite, microcline and plagioclase. Small amounts of biotite and opaque minerals are common. Feldspars typically 25%.
sillimanite quartzite	5% to 10% sillimanite, 1% to 3% biotite and trace amounts of zircon, magnetite, apatite, rutile and muscovite.

Tillman Metasedimentary Group

meta-graywacke and argillite	Quartz, various feldspars, chert and quartzite. Chert (about 5%) is universally present. Some phyllite grains. Matrix contains biotite, quartz and feldspar with some epidote, chlorite, muscovite and hornblende.
schist and hornfels	Crystalloblastic quartz, plagioclase, biotite and/or muscovite and hornblende. Hornfels consists of quartz, plagioclase, biotite and actinolitic hornblende.
bedded chert	reddish-brown and dark greenish-gray very finely crystalline chert. Up to 5% biotite or chlorite and muscovite.

Note: All data are taken from Ham and others (1964).

granite magmas. The unit is probably much more extensive than well logs now indicate, but it is buried too deep in surrounding basins to be drilled. As mentioned above, this unit could postdate the Raggedy Mountain Gabbro Group, because the presence of Meers quartzite in the gabbros is a tenuous age criterion (Powell and others, 1980).

The next(?) major event in southern Oklahoma was intrusion of the Glen Mountains Layered Complex. Layered-complex magmas may have intruded the Tillman metasediments to form a lenticular body, possibly 60 km by 200 km by 6 km thick. The complex appears to be typical of large, layered intrusions in that it was produced by crystal settling. The Navajoe