

feldspar absent everywhere but the Hide-A-Way Cove parking area. Andalusite has been identified in one sample, its first reported occurrence in Oklahoma. The quartzite is white to light gray, dark gray green where chlorite occurs (to 20 percent), and is not well bedded. The unit is described more fully elsewhere in this guidebook (Sides and Miller).

During Middle Cambrian time, the rhyolite was pyroclastically erupted onto an eroded gabbro surface; the rhyolite pile was at least 1.4 km (4,500 ft) thick. The gabbro, Proterozoic(?) to Cambrian in age (see Bowring and Hoppe, this guidebook), crops out 2.5 miles north of Hide-A-Way Cove. The Mount Scott Granite was injected as a sill, 152 to 274 m (500 to 900 ft) thick, along the rhyolite–gabbro contact. The Mount Scott Granite (Wichita Granite Group) and the Carlton Rhyolite Group are comagmatic, and formed 525 million years ago (Ham and others, 1964). The Pratt Hill quartzite appears to have been a

sedimentary unit that was deposited on the eroded gabbro surface. The possibility does exist that the quartzite is a xenolith of sediment into which the gabbro intruded. However, the Pratt Hill may not correlate well with the Meers Quartzite (see Sides and Miller, and Gilbert, for discussions). The rhyolite and granite of the southeastern Wichita Mountains (Hide-A-Way Cove area) locally appear to be folded into a southeast-plunging syncline (Schoonover, 1948). The Carlton Rhyolite outcrop south of Hide-A-Way Cove is diamond shaped (map view) and trends northwestward. The Mount Scott Granite outcrop wraps around the rhyolite on the north, northeast, and west sides. Gilbert has argued (Stop 4) that the Mount Scott overlies Carlton here; figure 127 shows that interpretation. The axis of this syncline is about 2 miles south of Hide-A-Way Cove, and trends northwestward. Its relation to the broader anticlinal structure of the region is not well understood.