

characteristically broken and corroded phenocrysts (quartz appears black). The thin-section scale (1 in. by 2 in.) is not adequate to describe the rock quantitatively. Two sections of the same rock were point-counted and the data listed in table 32, with noticeable differences in phenocryst ratio. Mount Scott Granite normally contains primary hornblende, although some specimens show late or secondary biotite. A typical late diabase plug cuts granite about $\frac{1}{3}$ mi to the south. A rhyolite dike, similar to the one on State Highway 49 by Medicine Creek, cuts granite north of the road.

The largest boulder streams in the Wichitas are developed on Mount Scott (fig. 128). These probably developed in Permian time and do not appear to be recent. Prominent fractures cut the mountain in an unexplained pattern. A combination of this pattern and apparent subtle rock differences yields a surface topography of quite varied character.

The cross sections (fig. 127) drawn to accompany the map show no faults. Although zones of intense brecciation are common, discernible offsets along regional lineaments have not been identified in the igneous terranes. Until more control is available, it seems better to leave this possibility open.

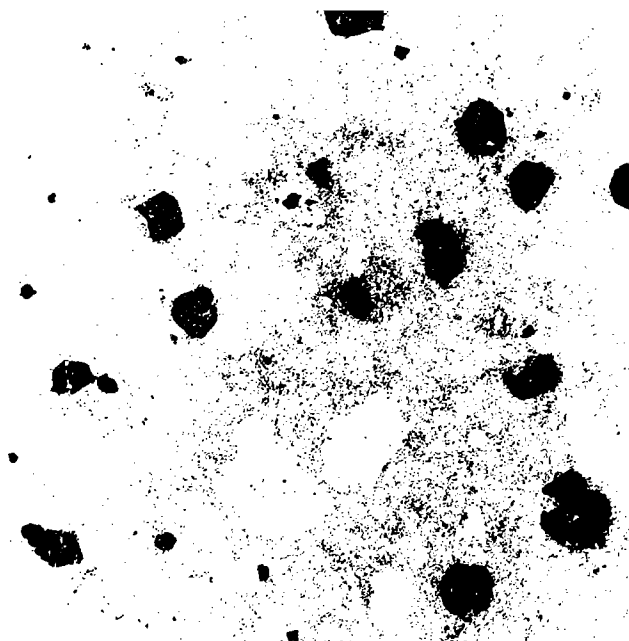


Figure 129. Photograph of thin section of Carlton Rhyolite from sample W-940. Width of section is about 1 in. Phenocrysts of quartz are dark, and those of alkali feldspar are light.

TABLE 32.—MODAL ANALYSES OF ROCKS FROM MOUNT SCOTT CAMPGROUND AREA (STOP 4)

		Mt. Scott Gabbro and Rhyolite (Site 1)															
Meers (Gray type - Davidson) Schoonover 14-3N-13W		Carlton Rhyolite								Mt. Scott	Mt. Scott	Late Diabase					
		W939				W940				W940	Schoonover	W7269A	W7269B				
		NE	SW	NW	SW	NE	NW	SW	SW	NW	Schoonover		SW	NE	NE	NE	SW
		14-3N-13W				14-3N-13W					14-3N-13W		14-3N-13W				
Qtz-P					4.25				7.5	4			1.75				
Alk-F-P					4.75				6	10.75			18.75				
Qtz-G	55	}			87.25	}	83	}	80.75		29.8	31.5					
Alk-F-G																	
Plag (Free)											64.8	43.25					
Hornbl											3.8	.25			33.75		
Biotite												.25			25 (px)		
Opaques	7				2.25				2.75	2.5	1.5	1.5			19		
Apatite											tr				13		
Sphene	tr										.05	tr			tr		
Zircon	tr										tr	tr			1.75		
Fluorite	1				.5				tr	.25	tr	.25					
Alteration					tr					tr		tr			2.25		
Hematite											tr						
Chlorite/Mica	36				.75				.75	1.5		2			5		
Epidote					.25				tr	.25		tr					