

TABLE 4.—CHARACTERISTICS OF MAJOR OUTCROP AREAS OF CARLTON RHYOLITE GROUP

From Hanson (1977)

Phenocryst Modal Data	Fort Sill Section	Blue Creek Canyon Section	Bally Mountain Section	Arbuckles Section
Alkali feldspar	8.9 (5)*	7.8 (15)	11.1 (3)	11.7 (3)
Plagioclase	tr "	.1 "	tr "	1.3 "
Quartz	6.0 "	.3 "	.8 "	.8 "
Qtz				
Qtz + Feldspar	.40	.04	.07	.06
Normative Data				
qtz	39 (6)	34 (19)	32 (14)	35 (7)
or	26 "	32 "	24 "	26 "
ab	25 "	19 "	30 "	27 "
an	6 "	7 "	7 "	5 "
ab + an				
ab + an + or	.54	.45	.61	.55
Trace Elements, ppm				
Sr	99 (6)	51 (19)	68 (15)	79 (7)
Ba	4251 "	2149 "	1659 "	1758 "
Mn	162 (18)	330 (28)	291 (21)	339 (12)
Cu	5 "	12 "	8 "	5 "
Zn	78 "	106 "	100 "	80 "

* Values in () indicate number of samples averaged.

are not generally strung out or aligned. The vapor did not escape the cavities until solidification was complete and the rock mass rigid enough to support the load, because the holes are not deformed. Normally, the cavities are 1 to 5 cm in diameter. Other areas where granophyric texture (taken to indicate quenching) is common, but cavities are not, may have lost their vapor before complete solidification, so that the holes closed and are not now recognizable. More detailed mapping of such features on finer scales possibly would be useful as a guide to extent of overburden during intrusion.

The granites are 90 to 95 percent alkali feldspar and quartz. These granites are classic hypersolvus types, after the usage of Tuttle and Bowen (1958). Plagioclase occurs systematically as a primary phase only in the Mount Scott Granite, and then not uncommonly surrounded by alkali feldspar. Mafic phases are amphibole, biotite, and magnetite, but there is generally an antipathetic relationship between amphibole and biotite. Each of the named granites has a distinctive mafic signature, with amphibole more common in the province as a whole. Amphibole types are mainly arfvedsonite or hastingsite,