in some of the rocks and the latter predominating in others. The olivin diabases are in general less feldspathic than those in which that mineral is lacking. Much variation in structure is also shown which, to a considerable degree at least, depends on composition. The ophitic structure is the more usual one. In many of the dikes, however, the interspaces between the feldspar laths are filled by clumps of smaller augites, instead of the large augites which solidly fill the interspaces in the typical structure. In the more feldspathic dikes the interference of the different feldspar laths with one another, and their abundance much hinder the development of the normal structure.

In many of the dikes there is a more or less well marked tendency on the part of the feldspar laths to assume a radial grouping around various centers, giving rise to the divergent rayed structure. In some such the augites also tend to a long prismatic, or lath, shape, and these may take on an independent radial grouping also. A tendency on the part of the augites to show their own crystal boundaries is found in many of these rocks, as Kemp has shown, producing a grading toward camptonite.

Chemical analyses and discussion

	1	2	3	4	5	6	7	8	9
SiO_2 ...	43.41	44.51	45.46	46.73	50.89	52.53	63.02	67.16	68.96
Al_2O_3 ...	19.42	19.99	19.94	16.66	15.39	18.31	14.87	14.53	15.25
Fe_2O_3 ..	5.72	7.22	15.36	3.56	5.77	.34	6.53	4.17	3.28
FeO ...	6.691			8.45		6.43	none		none
MgO ...	5.98	8.11	2.95	8.12	7.6	1.82	.95	.41	.2
CaO ...	9.11	8.15	8.32	8.03	8.75	3.15	1.12	1.26	.76
Na_2O ...	4.39	5.24	2.12	3.73	5.67	7.26	5.85	5.55	5.45
K_2O	.47	2.6	3.21	1.64	2.72	6.47	5.62	6.1	5.01
H_2O	3	2.93	2.3	2.39	2.46	1.16	1.45	1.1	.91
TiO_2 ...	.35	.....	.....	.03	.....	.....	.....	.....	.....
P_2O_5 ...	.....	.....	.....	.39	.....	1.59	.....	.....	.....
Cl	.....	.....	.....	.18	.....	.4	.....	.....	.....
F	.....	.....	.....	.26	.....	.32	.....	.....	.....
Cr_2O_3 ..	.....	.....	.....	.06	.....	.....	.....	.....	.....
MnO ...	.....	.....	.....	trace	.....	.15	.46	.....	.23
BaO ...	.....	.....	.....	.04	.....	.....	.....	.....	.....
CO_2	2								
Total ..	100.54	98.75	99.66	100.2	99.25	99.93	99.87	100.28	100.05
O=Cl & F.....				.14		.22			
				100.06		99.71			