

The analysis of the tuff, column II, resembles that of primary blairmorite, column I, in a marked degree, differing virtually only in the water content, and in the proportions of the alkalies. The difference almost certainly is caused by relatively more orthoclase in the tuff than in the primary blairmorite. This close agreement in composition is another instance of the similarity obtaining between some of the pyroclastic rocks in this suite, and their parents, a fact which has been referred to before.

The other analyses given bear a marked resemblance to that of the blairmorite.

The results of the calculation of the analysis of the blairmorite according to the Quantitative System is given below.

Class, persalane; order, lendofelic, russare; rang, persalane, miaskase; subrang, dosodic near persodic, miaskase.

The analysis of the analcite phenocrysts, which were obtained free from the enclosing matrix, is given below in column I with some other determinations of the composition of analcite for comparison.

Analyses of Analcite.

	I	II	III	IV	V
SiO ₂	54.16	54.39	54.85	57.06	54.16
TiO ₂	0.15	..	..	..	..
Al ₂ O ₃	22.35	22.08	22.59	21.48	23.12
Fe ₂ O ₃	0.92	2.85	..	0.13	..
FeO.....	0.06	..	..	..	..
MnO.....	trace	..	..	..	..
MgO.....	0.25	0.27	..	..	..
CaO.....	0.60	0.29	0.89	0.16	..
Na ₂ O.....	12.49	11.75	12.58	12.20	14.12
K ₂ O.....	0.59	1.03	..	..	..
H ₂ O+.....	8.50	7.97	9.06	8.38	8.50
H ₂ O-.....	..	0.55	..	0.58	..
CO ₂	0.30	..	..	..	..
	100.37	101.18	99.97	99.99	100.00