

	I	II	III	IV	V	VI	
Si O ₂	65.15	65.70	65.30	65.90	65.66	66.44	67.06
Al ₂ O ₃	20.55	20.80	20.70	19.46	20.05	18.35	19.00
Fe ₂ O ₃				.44	Trace.	1.00	
Mn O.....					.13		
Ca O.....	.73	.84	.84	.28	.07	.67	
Mg O.....			*		.18	.24	
K ₂ O.....	6.39	6.43	*	6.55	6.98	6.37	6.93
Na ₂ O.....	6.67	6.82	*	6.14	6.54	5.56	7.00
H ₂ O.....	.50	.50	*	.12	(.19) (.28)	.40	
	99.99	100.79		98.90	100.64	99.03	99.99

* Incomplete. † At 110°. ‡ Above 110°.

These analyses show clearly the chemical identity of the feldspars here compared. It is noticeable, however, that in minerals from Shefford and Bromie, sodium is slightly in excess of potassium, while the proportions are reversed in all the others cited. An analysis of microperthite from pulaskite at Moultenborough, New Hampshire,* however, shows potassium to be slightly subordinate to sodium in amount.

Augite.

The augite of this rock occurs in a few stout columnar crystals, and in ordinary light is either colourless, or has a pale greenish tint without perceptible pleochroism. It is frequently associated with smaller grains of magnetite, and both may enclose needles of apatite.

Hornblende.

The hornblende is green in colour, never brown as in the essexite. Sections p. l. to c = deep green; b = yellowish-green; a = straw colour. The scheme of absorption is accordingly $c < b < a$, and the maximum extinction angle that was observed, $c \wedge c = 26^\circ$, practically the same as in the brown hornblende. It is sometimes more abundant than augite, and at others nearly or altogether wanting. The same may be said of the occurrence of biotite. This mineral is of a deep brown colour in ordinary light and polarizes in brilliant tints, probably indicative of a larger proportion of iron than usual in its composition.

Biotite.

Sphene. Quartz.

Sphene frequently appears, and occasionally a few grains of quartz are seen, (Nos. 166, 118, 188). One of these shows an uniaxial cross and positive sign, thus clearly identifying it.

In structure the rock is coarsely granitic, but the absence of quartz in sufficient amount to form a cementing material for the other con-

* Quoted by Prof. Rosenbusch in 'Elemente der Gesteinslehre.'