CHEMICAL COMPOSITION.

—	Essexite.	Nordmarkite.	Pulaskite.
SiO_2	53·15	65·43	59·96
TiO_2	1·52	·16	·66
Al_2O_3	17·64	16·96	19·12
Fe_2O_3	3·10	1·55	1·85
FeO	4·65	1·53	1·73
MnO	·46	·10	·49
CaO	5·66	1·36	2·24
BaO	·13	none.	·12
MgO	2·94	·22	·65
K_2O	3·10	5·36	4·91
Na_2O	5·00	5·95	6·98
P_2O_5	·65	·02	·14
CO_2	·39	none.	none.
SO_3	·28	·06	·08
Cl	·07	·04	·14
H_2O	1·10	·82	1·10
	99·84	99·86	100·17

While the field relations of these rocks are such as to leave no doubt that they are products of three distinct intrusions, their mineralogical and chemical characters as clearly show them to be genetically related.

Chemical composition.

The most basic rock was intruded first, and that highest in silica second, while the third in order of age is intermediate in composition. All are comparatively rich in alkalies, and the greatest variation in the proportion of the bases is in lime and magnesia. The extreme range of silica is 12·28 %, alumina, 2·16 %, lime 4·30 %, magnesia 2·72 %, potash 2·26 %, and soda 1·98 %.

The mean between the composition of essexite and nordmarkite, in equal proportions, approximates quite closely to the composition of pulaskite, thus :

—	Mean of Essexite and Nordmarkite.	Pulaskite.
SiO_2	59·29	59·96
TiO_2	·84	·66
Al_2O_3	17·36	19·12
Fe_2O_3	5·41	3·58
FeO	·43	·49
MnO	3·51	2·24
CaO	1·58	·65
MgO	4·23	4·91
K_2O	5·47	6·98
Na_2O		