

	1	2	3	4	5	6
MgO	5.21	8.12	.35	.95	.26	.2
CaO	8.09	8.03	3.06	1.12	2.2	.76
Na ₂ O	3.48	3.73	5.06	5.85	3.5	5.45
K ₂ O	1.89	1.64	5.15	5.62	5.9	5.01
H ₂ O	1.13	2.39	.3	1.45	.4	.91
TiO ₂	3.6	.03	.07	.....	.....	.....
P ₂ O ₅ .....	.06	.39	.....	.....	.03	.....
Cl .....	.21	.18	.....	.....	.....	.....
F .....	.....	.26	.....	.....	.....	.....
Cr ₂ O ₃ .....	.....	.06	.....	.....	.....	.....
MnO .....	.06	trace	trace	.46	.1	.23
BaO .....	.04	.04	.13	.....	.05	.....
Total	100.06	100.2	99.73	99.87	100.22	100.05
O=Cl & F.....	.05	.14				
	100.01	100.06				

- 1 Gabbro (hyperite) from near Nicholville, St Lawrence co.; no. 2 of first table of analyses.
- 2 Diabase, Bellmont township, Franklin co.; no. 4 of second table.
- 3 Augite syenite, Loon lake, Franklin co.; typical; no. 11 of first table.
- 4 Normal syenite porphyry, Rand hill, Clinton co.; no. 7 of second table.
- 5 Quartz augite syenite, near Willis pond, Franklin co.; no. 14 of first table.
- 6 Quartz syenite porphyry, Rand hill; no. 9 of second table.

A comparison of the first two of the above analyses shows a very close agreement between the gabbro and the diabase in composition, the most striking discrepancy being in the titanium percentage. This difference is perhaps sufficiently pronounced to throw some doubt on the magmatic relationship, since in other respects the analyses might be duplicated from many parts of the earth's surface, both gabbros and diabases of this approximate composition being among the most widespread of igneous rocks. If this high titanium percentage was characteristic of the rocks of the big intrusions, it should appear in the diabases, also if they are congenital. But, so far as the analyses go, they do not indicate a high titanium percentage in the big intrusions except in the basic gabbros, and most of the analyses which have been made of them are from specimens taken from the wall rocks of titaniferous ore bodies, which are segregations from the magma which are extra rich in iron and titanium. It is therefore thought likely that this difficulty in the way of ascribing magmatic relationship is more apparent than real.