

so excessive as to be almost improbable, especially when considered in the light of countless observations all tending to show the low thermal energy of sheet-like bodies of basic rocks. Apparently Daly's argument also fails in another way, since in East Kootenay it has been found, as illustrated by many cases, that the thickness of the granite (micropegmatite) in any sill bears no relation to the thickness of the sill itself, which would be absolutely necessary under the assimilation-differentiation hypothesis.

The strong emphasis placed by Daly on the chemical similarity between the granite (micropegmatite) and the enclosing quartzites (as shown by the following analyses), loses much of its force when critically examined.

	1.	2.
SiO ₂	76.90	72.05
TiO ₂	0.35	0.63
Al ₂ O ₃	11.25	11.88
Fe ₂ O ₃	0.69	0.83
FeO.....	3.04	4.87
MnO.....	0.02	0.12
MgO.....	1.01	0.85
CaO.....	0.88	2.10
SrO.....		
Na ₂ O.....	3.28	2.20
K ₂ O.....	1.36	2.66
H ₂ O.....	0.20	0.10
H ₂ O+.....	1.20	1.21
CO ₂	tr.	0.37
P ₂ O ₅	0.15	0.09
S.G.....	100.33	99.96
	2.650	2.790

1. Represents the analysis of a type specimen of Kitchener (Aldridge) quartzite;
2 is the average analysis of acid zone, Moyie sill.

The rocks into which the sills are intruded are not all quartzites as might be concluded from Daly's description. Half of the series are very slaty and argillitic, analyses of which are not available, and, the rocks which he holds to have been assimilated, may just as well be conceived to be dominantly argillitic as quartzitic. The rocks through which the magma passed before