

Lime	1.57
Magnesia30

The residue consisted of the same dark and light coloured parts as in the case of the rock first described. Calculated in the same manner as it, the mineralogical composition of this rock from the Quincy adit would be

Delessite	42.60
Labradorite	50.69
Pyroxene or hornblende.....	5.62
Magnetite	1.09
	<hr/>
	100.00

From the particulars above given, it would seem that the constituents of the traps of the Portage Lake district are principally feldspar of the labradorite species, and chlorite of a species allied to delessite, with which are found occasionally mica, small quantities of magnetite and perhaps of augite or hornblende. Similar results are given in Foster and Whitney's Lake Superior Report II, 87; but the relative proportions of the constituents are not given, nor is the peculiar nature of the chlorite referred to. The name of greenstone would seem altogether inapplicable to these rocks, because augite or hornblende only occurs in them occasionally if at all, and then in comparatively small quantity. As to the name of trap, the rocks previously so called have been by the best lithological authorities subdivided into two families, Melaphyre and Basalt.* The latter family which includes dolerite, anamesite and common basalt is distinguished by the dark, mostly black or greyish-black colour, the high specific gravity, and the richness in augite and magnetite of its rocks, and by the frequent occurrence in them of olivine and zeolites. The melaphyres on the other hand are characterised by their apparent want of augite, by their comparatively low specific gravity, by their colour of reddish-grey mixed with green and black, and their frequent development as amygdaloidal varieties; in which case quartz, calcspar and delessite fill the cavities more frequently than zeolites. The traps above described would seem to belong to the class of melaphyres, and to resemble especially those of Mansfeld described by Freiesleben, of Saxony,† and that of Faucogney described by Delesse.

* Naumann; *Lehrbuch der Geognosie* i, 599; *Senf. Classification und Beschreibung der Felsarten*, pp. 262 & 272.

† *Geognostische Beschreibung des Königreiches Sachsen* ii, 447.