

south shore are composed of a peculiar rock, which is nowhere visible on the main island. It consists of a reddish-brown impalpable matrix, with a hardness but slightly inferior to that of orthoclase, in which minute spots of a soft yellowish-white material are discernible. There are also lighter flesh-coloured grains observable, which seem to be incipient felspar crystals. The matrix is difficultly fusible to a colourless blebby glass, and the specific gravity of the whole rock, where freshly broken, is 2.469. A piece slightly bleached to a greyish-white, from its adjoining a crack in the rock, gave a specific gravity of 2.477. Some parts of it exhibit a slightly porous structure, but this was not the case with either of the pieces whose specific gravity were determined. The rock has a very uneven fracture, and is probably trachytic phonolite. The occurrence of these trachytic rocks on Michipicoten Island is very interesting, for they are the only ones of the region which have in other countries been found in connection with undoubted volcanoes.

The general strike of the strata of the rocks of Point Keweenaw, at least in the neighbourhood of Portage Lake is N. 30° to 40° E., and the dip 55° to 70° north-westward. The melaphyres predominate, although polygenous and porphyritic conglomerates are also frequent. The copper-bearing tufaceous melaphyres seem to be more plentiful here than in the other areas, or at least the mines to which they give rise are more extensively worked.

At the other points in the east shore of the lake, where rocks of the character of melaphyre have been observed, the area occupied by them is very limited, and confined to narrow strips of beach and rocky ground, between the lake and the much more elevated Laurentian or Huronian rocks. In the most westerly cove on the south shore of Bachewahnung Bay, red sandstone is observed striking N. 12° W., and dipping 15° south-westward. It is interstratified with conglomerate, the boulders of which are principally of quartzite, dark green slate and red-jasper conglomerate, which have doubtless been derived from the Huronian hills in the rear. They range in diameter from one to twelve and even eighteen inches. The matrix is generally red sandstone, but the interstices are sometimes filled out with quartz. A short distance along the shore to the north-east exposures occur of a reddish-brown melaphyre tuff, containing amygdulæ of calcspar and quartz, the matrix of which is very soft and decomposed.