

more likely are simply outliers of the main mass, connected with it not far underground. The present areal distribution of the rock merely gives its extent in the plane in which the present erosion surface cuts it. Since this surface is irregular, we have some slight idea of the thickness of the mass, the higher mountain peaks furnishing vertical sections of over 3000 feet. But the amount which has already been removed by erosion can be but vaguely estimated, and the extent of the mass in depth is wholly problematic. Any estimates of the original bulk of the mass can be nothing but pure conjectures, except that it can safely be said that it was vast.

*Mineralogy.* These rocks are composed mainly, and sometimes wholly, of basic plagioclase feldspar, usually labradorite but sometimes bytownite or anorthite. They are eruptives of the gabbro family extra rich in feldspar, which forms from 90% to 100% of the whole rock throughout most of its extent. The minerals next in abundance are augite and ilmenite (or titaniferous magnetite), followed by hypersthene. Minute apatites are usually present. In the many differing phases which the rock presents, several other minerals creep in, the more common of which are hornblende, biotite, garnet, microperthite, quartz, oligoclase and a sulfuret, either pyrite, chalcopyrite or pyrrhotite. These are the original minerals of the rock except where they are due to recrystallization consequent on metamorphism. Subsequent alteration has locally produced other minerals, notably zoisite, epidote, chlorite, scapolite and muscovite, and surface decay has formed yet others.

The feldspar is usually labradorite, twinning striations showing plainly on fresh cleavage surfaces. The thin section usually shows it to be full of minute, rodlike inclusions, all with parallel arrangement, of some opaque mineral, likely ilmenite. (These are likely responsible for the usual dark blue color of the mineral, and probably for the occasional iridescence, in greenish blue colors, as well. This is by no means so frequent or so well displayed as in the Labrador and Norway anorthosites, but is a common phenomenon in the region.)

Labradorite