

The absorption is $\epsilon > \eta > \alpha$.

It also occurs in the peculiar rock which was referred to above as a gabbro and was found in a number of places between the true anorthosite and the gneiss.

BIOTITE.—Biotite never occurs in large amount but is present rather frequently in very small amount as an accessory constituent of the normal gabbro. It is usually found with iron ores or with the hypersthene and shows the characteristic brown color, strong pleochroism and parallel extinction.

MUSCOVITE OR PARAGONITE.—(See under "Plagioclase.")

CHLORITE.—Occasionally in small quantity as a decomposition product of pyroxene or biotite.

QUARTZ.—It is doubtful whether this mineral ever occurs as a primary constituent of the anorthosite. In a hand-specimen from the west side of the Achigan River, near New Glasgow, it was noticed in the form of rather small round grains disseminated through the rock and looking like a primary constituent. But the rock is much decomposed and doubtless some secondary quartz is present as a product of decomposition of pyroxene, so that the quartz which appears to be primary at first sight may be in reality of secondary origin.

In the gabbro which occurs as above stated in many places between the typical anorthosite and the gneiss, quartz is quite frequent. But in this rock many facts point to the secondary origin of the quartz. It occurs often for example in more or less sharply defined veins made up of large individuals. When it occurs in the form of separate irregular grains these extinguish uniformly, although they are often more or less fissured, but they are by no means so much broken as one would expect, if they were primary ingredients, in view of the extremely broken condition of the feldspar and the other constituents of the rock.

ILMENITE AND MAGNETITE.—In nearly every section of anorthosite some irregularly shaped grains of an opaque black iron ore are seen. These are usually few in number. The