



## GEOLOGICAL NOTES

**UPPER HURONIAN.**—The limestones and cherty dolomites found in the northeast part of the map, and which occupy the basin of Mistassini lake to the northeast, bear a close resemblance to the rocks of lake Superior named Upper Huronian. Being without fossils their classification here as such is only due to this resemblance.

They rest unconformably upon the Lower Huronian rocks of Wakonichi, and they are not penetrated by the diabase associated with the Lower Huronian rocks.

**LOWER HURONIAN.**—The rocks that occupy at least three-fourths of the area of the map are classed under this heading. They include the bedded conglomerate, quartzite and arkose found about Wakonichi lake, in association with green diabase and diabase-schist. These rocks bear a close resemblance to the rocks of Timiskaming lake, which contain the valuable small veins of silver, cobalt and nickel. No such veins have as yet been discovered in the Chibougamua region.

The diabase and diabase-schist are wide-spread in distribution in this region. When unaltered by pressure they lie in nearly horizontal sheets, but when rendered schistose by pressure the bedding appears to be nearly vertical. Both varieties of the rock are largely decomposed to chlorite. These rocks often contain considerable quantities of sulphides especially near their contact with the gabbro. Small stringers of quartz are also common, but they are not well mineralized except close to the same contacts.

**LAURENTIAN.**—Small areas of crystalline gneisses and schists, resembling those of the Grenville Series of the Laurentian, are seen in a number of places. There is no evidence that they are not more highly altered portions of the diabase and granite rocks of the region, and are only classed as Laurentian on account of their highly crystalline condition.

**HORNBLende GRANITE.**—Two or more areas of hornblende granite are found in the region. The largest extends irregularly westward, from the east side of Chibougamua lake, to beyond the western limit of the map. These granites are newer than the Lower Huronian and also newer than the gabbro which cuts the Lower Huronian.

**BIOTITE GRANITE.**—A large area of nearly white biotite granite occurs in the eastern part of Obatogamua lake. Similar granite is found in the southern parts of Eau Claire and Péganville