

and three of these are of granite. For twelve miles up a stream entering the eastern end of Matagami lake from the northeast, only one exposure of rock occurs.

In the vicinity of Obalski lake on the Harricanaw river, and in the neighbourhood of portions of Matagami, Olga and Gull lakes, considerable areas of Keewatin rocks are quite easily accessible. With this description in hand, the energetic prospector should not shun other areas where similar rocks outcrop less frequently, but he will enter upon his task with a knowledge of the difficulties attending his work.

During the summer, in connection with our work in mapping, search was made for minerals of economic value. Quartz veins, often containing some pyrite, frequently traverse the exposures of Keewatin rocks in all parts of the area. It is to be hoped that a continued search of these veins will lead to the discovery of some which carry gold. In some localities, especially on the western and southern shores of Matagami lake, bands of the Keewatin schists were found to be very heavily impregnated with pyrite and pyrrhotite. At a point about four miles eastward from the mouth of the Bell river, at the contact between intrusive quartz porphyry and chlorite schists, the latter have been heavily impregnated with pyrrhotite. An assay of a sample from this locality yielded only a trace of gold. Assays of numerous samples from other localities have not yet been made. A few specks of copper pyrites were occasionally noticed in the Keewatin schists, and also at the contacts of some of the dykes of newer diabase.

*Diamonds:* Last summer six or seven men, under the guidance of Mr. Taberner, were prospecting for diamonds in the blue clays and sandy gravels of the vicinity of the mouth of the Bell river on Matagami lake. They performed much work, and their methods are to be commended; but it is plain that diamonds will not be discovered in this locality. In the vicinity of Matagami lake, no rocks occur which are related closely to those bearing diamonds in other parts of the world. During the summer, other parties were engaged in searching for diamonds in similar clays in more remote parts. It is *not* to be anticipated that diamonds will be discovered in these stratified blue clays of the Clay Belt of the North. The celebrated "blue clays" of Kimberly, South Africa, have been derived from the decomposition of very basic igneous rocks within the pipes or necks of old volcanoes. The blue clays of this northwestern portion of Quebec have been deposited from the muddy waters of the historical lake which has previously been described in this report.