

PRELIMINARY REPORT ON THE SERPENTINES AND ASSOCIATED ROCKS IN SOUTHERN QUEBEC.

INTRODUCTORY.

General Statement.

The district described in this report is distinguished for the production of asbestos and chromite. It includes all the mines at present producing these minerals in Canada, and furnishes about three-fourths of the world's supply of asbestos. It also embraces larger areas which are being vigorously prospected, and others of less probable value which it has been necessary to study in order to find out the extent and relations of the mineral deposits, and to ascertain the geological structure of the series to which they belong. The report, therefore, deals, primarily, with the economic resources; but some attention is also given to the petrography and structural geology of the district.

The work has been greatly facilitated by assistance freely and courteously rendered by the managers of the various mines of the district. Access to the mines and concentrating mills, and much information derived from the long and successful experience of many of the pioneer managers has been readily given, which, it is needless to say, has been of great assistance in conducting the investigation.

The field work upon which this report is principally based was carried on during the seasons of 1907 and 1909. In the first season the mode of occurrence of the mineral deposits was studied; chiefly in and near the working mines; in the second, the distribution and extent of the known deposits and of the rock formations containing them, was traced, and material for a preliminary map obtained.

The Eastern Townships map of the Geological Survey series, enlarged to a scale of 1 mile = 1 inch, was used as a basis; and the surveys were principally made by compass and chain. In a few places where greater accuracy was required, transit and stadia surveys were made.

Alex. MacLean, and R. Randal Rose, acted as field assistants in 1907; and in 1909, Mr. MacLean again assisted. It is a pleasure to acknowledge the efficient services of these gentlemen.