

Table 1 gives the most recent estimate of Canadian minable coal reserves, based on data compiled for the Report of the Royal Commission on Coal, 1946. The method by which the estimates are arrived at is described in the 1946 Year Book article at pp. 466-467 of the 1947 Year Book.

It will be noted that the estimated coal reserves are arranged in five different classes. The reason for this is that more than one rank of coal occurs in some of the deposits and the tonnages of some of these are so small or indefinite, due to the lack of chemical analysis, that it is difficult or impossible to separate the different ranks.

The reserves of each of these classes are calculated under the headings "Probable Reserves" and "Possible (Additional) Reserves". The Probable Reserves are those that have been calculated on considerable geological, drilling and mining development data, whereas the Possible (Additional) Reserves are those based on geological data of much more limited extent.

**Preliminary Statement of the Quebec-Labrador Iron-Ore Resources.\*—** Looking at this development in the perspective of time, the stages seem typical of many important mineral districts. The geological mapping of an early period has proved to be a valuable guide for prospecting, and the success achieved in a part of the field has encouraged research in the extensive favourable grounds indicated by the early exploration.

In 1895, Dr. A. P. Low, of the Geological Survey of Canada, reported, as a result of his explorations along canoe routes in the Labrador Peninsula, a belt of rocks, correlated with the Animikie Series of the Lake Superior Region, extending with a width of 40 miles and a length of over 350 miles northwesterly in the basins of the Hamilton and Koksoak Rivers. Along the southwestern part of this belt he found thick and extensive masses of iron formation. He gave descriptions, with analyses, of the siliceous iron ores that he encountered, and expressed the opinion that the iron ore of this region might become of economic importance.

The advent of the aeroplane made it possible, in this remote area of Quebec-Labrador, to prospect the iron-bearing rocks with the thoroughness required to discover the mineral deposits as now known. In 1929, Dr. J. E. Gill, having made observations from the air, made the first find of a high-grade hematite ore body, on a concession held by Weaver (Minerals) Ltd., at Ruth Lake in Labrador. This discovery was the incentive for subsequent prospecting for natural iron ore in this region.

In 1936, the Labrador Mining and Exploration Company, upon incorporation, acquired the Weaver concession, and in 1948 held from the Newfoundland Government about 19,000 square miles in the upper part of the Hamilton River Basin, Labrador. The Hollinger North Shore Mining Company, incorporated in 1942, held 3,900 square miles in an adjacent area to the north, in Quebec. In these areas, under the direction of Dr. J. A. Retty, Chief Geologist of these companies, intensive prospecting, geological mapping and reconnaissance programs were carried on during summer seasons since 1936. A number of rich hematite deposits, including the Goodwood, Ferriman, Burnt Creek and Ruth Lake, thousands of feet long and hundreds of feet wide, were revealed in a zone, about 50 miles long, crossing the Quebec-Labrador Boundary, and at Sawyer Lake some 40 miles farther to the southeast. In 1944, diamond drilling on the Sawyer Lake deposit penetrated

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