## MINERAL INDUSTRY OF DISTRICT OF MACKENZIE, NORTHWEST TERRITORIES

By C. S. LORD. Ottawa: Geological Survey of Canada Memoir 261, 1951.  $9\frac{1}{2} \times 6\frac{1}{2}$  inches; ix+336 pages; plate, diagrams, and folding maps. \$1.25.

The greatest concentration of the mineral industry in the Northwest Territories is in the Yellowknife area where, following the discovery of gold on the east side of Yellowknife Bay on the north shore of Great Slave Lake, the settlement of Yellowknife was founded in 1935. It was that year that gold was first found on the west side of the bay, and which led to the development of the Con, Negus, and Rycon mines. In 1944 important gold deposits were found on the property of Giant Yellowknife Gold Mines and, during the following two years the rich ore disclosures on the Giant claims sparked one of the most exciting gold rushes in the history of Canadian mining. During that period it is estimated that more than three hundred companies were formed on properties north and east of Yellowknife and hundreds of discoveries were made in a vast area of geologically favourable formations.

As a result of these activities, however, only one mine other than Giant Yellowknife was developed to successful production before rising costs due to postwar inflation curbed the flow of funds necessary for mine development. On the other hand, more than a dozen discoveries were developed to various stages sufficient to indicate good prospects for commercial production at some future time when adequate funds were available. In 1948, following the relaxation of restrictions on prospecting for radioactive ores, there followed a new surge of exploration directed towards geological formations of younger age than those in which the gold deposits occur and, since the outbreak of fighting in Korea, prospecting emphasis has been transferred to the search for base metal deposits.

In Memoir 261 Dr. Lord has recorded the sober facts resulting from these past activities, and has presented the geological background on which to assess them. Ten years have elapsed since the publication of the predecessor volume, also by Dr. Lord, entitled 'Mineral Industry of Northwest Territories' (Geological Survey Memoir 230). This earlier volume, a slim prototype of its present successor, dealt with mining activities up to 1939. The present publication, in effect a second edition, but restricted to Mackenzie District in which almost all important mining activities of the Northwest Territories are located, covers developments up to 1947. The relatively considerable lapse of time between then and the publication date of 1951 is unfortunate as many important mineral developments during the past three to four years have not been recorded. Thus the volume is not up-to-date with respect to the development of high-grade zinc ores at Indian Mountain Lake, silverbearing lead ores in the vicinity of O'Connor Lake, and uranium ores both in the east arm of Great Slave Lake and at Hottah Lake.

A total of 139 mineral properties is described in Memoir 261 and on many of these properties are several veins or mineral deposits. Dr. Lord has personally examined most of them, many several times, and he has visited all the important developments disclosed up to 1947. Probably no publication of the Geological Survey of Canada contains more factual data on the dimensions and grades of ore shoots and mineral deposits. Such data together with the geological background make an outstanding contribution, involving not only an accurate description, but making possible an evaluation of the various prospects. This volume is indispensable to the prospector, mining geologist, the engineer, and the investor, who are interested in the Northwest Territories.

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