

A minor production of lead and zinc concentrates came from the zinc-lead-silver property of Jardun Mines Limited, 18 miles northeast of Sault Ste. Marie. New zinc production from the Manitowadge area started in July 1957 from Wilroy Mines and was scheduled to start later in the year from Geco Mines.

Quebec.—Mineral development activity in Quebec reached new peaks during the review period resulting in a marked increase in the Province's metal-producing capacity and confirming its great potentiality as a producer of iron ore and of base metals. Fresh proof of the tremendous wealth of Quebec's varied and extensive mineral resources was found in the discovery in northern Ungava of widespread nickel occurrences in a mineralized belt of rocks extending from Cape Smith on Hudson Bay to Wakeham Bay on Hudson Strait and, in western Quebec, of copper-zinc deposits in the Bell River-Mattagami Lake area. A record 55,523 claims were staked in the Province in 1956.

Quebec ranked second among the provinces in value of mineral production in 1956. Its total mineral output rose almost 20 p.c. above 1955 to \$426,608,000 and the value of its metal production 28 p.c. to \$236,213,000 which was only \$43,000,000 short of the total value of the Province's mineral output in 1954. Quebec is the second largest producer of copper, gold, iron ore, and zinc and the only producer of molybdenite and of titanium ore, the latter being from the large deposits of ilmenite at Allard Lake. Silver, selenium, magnesium, lead and bismuth make up the remainder of the Province's metal production.

Quebec is rapidly becoming a major world source of iron ore. Production in 1956 jumped 90 p.c. in volume over 1955 to 6,960,000 long tons and more than doubled in value to \$56,203,000. Developments under way at various properties indicate an output several times this size and value within the next decade.

With the exception of a minor tonnage from Quebec Iron and Titanium Corporation, production in 1956 came from the operations of Iron Ore Company of Canada in New Quebec-Labrador. This Company mined over 12,000,000 long tons of iron ore, more than 60 p.c. of which came from the Gagnon and French mines in Quebec. The ore was shipped by rail 360 miles to Sept-Îles on the north shore of the St. Lawrence and then by boat mainly to United States. A total of 2,757,712 tons was shipped through the St. Lawrence canal system to Great Lakes ports, with transshipment at Contrecoeur, near Montreal. Of the 1956 output, 9,447,000 tons went to the United States, 1,470,000 tons to the United Kingdom, and 391,000 tons to western Europe; 704,000 tons were utilized in Canada. A new mine, the Ferriman, scheduled for production in 1957, and total shipments from Sept-Îles are estimated at more than 13,000,000 tons for that year.

In addition to Iron Ore Company's large high-grade deposits in New Quebec-Labrador, Quebec has huge tonnages of low-grade iron-bearing material, several deposits of which are being developed toward production. These include the concentrating-grade magnetite deposit of the Hilton Mines, formerly known as the Bristol Mines, about 40 miles northwest of Ottawa, and the holdings of The Cartier Mining Company Limited, a subsidiary of United States Steel Corporation, in the Mount Reed-Mount Wright area about 300 miles northeast of Quebec City. Mining at the Hilton Mines, which is scheduled to start late in 1957, will be by open-pit methods at an annual rate of 600,000 tons of iron ore pellets containing about 66 p.c. iron.

The Cartier Mining Company plans to spend over \$200,000,000 to bring its large, low-grade iron ore deposits into production. Initial output is expected in 1961 at an annual rate of 3,000,000 tons with expansion to 10,000,000 tons possibly by 1965. Eventual output from the Company's operations in the general area could reach several times this figure. Present plans call for the construction of a 150-mile private railway into the area from Shelter Bay on the north shore of the St. Lawrence River.

Exploratory work, including geophysical examination, was done on several properties in the favourable iron-bearing formations which extend in an almost continuous arc from the most northerly tip of the west coast of Ungava Bay to the Mistassini area. At the southern end of the arc, a number of companies, including Jones and Laughlin Steel Corporation, Pickands Mather and Company, Iron Ore Company of Canada, The Steel Company of Canada and Canadian Javelin Limited have extensive holdings.