

properties were under exploration and development, mainly in the Kenora area in the northwestern part of the Province. However, underground exploration at one of these, Kenbridge Nickel Mines Limited, a Falconbridge subsidiary, was stopped in May 1957.

Copper production rose 6 p.c. in volume and 18 p.c. in value over the 1955 output to 309,199,000 lb. valued at \$126,951,000 and intensive pre-production development at a number of properties, particularly in the Manitouwadge area in northwestern Ontario, indicated a further marked increase in Ontario's copper output starting in 1957. International Nickel accounted for 88 p.c. of the output, and Falconbridge Nickel for 8 p.c. The remainder came from Nickel Rim and Nickel Offsets, Temagami Mining Company Limited in the Temagami area, and Min-Ore Mines Limited near Matachewan.

In the Manitouwadge area, Willroy Mines Limited brought its copper-zinc property into production in July 1957 and Geco Mines Limited expected to start operations in September 1957 at its copper-zinc-silver property. The new Willroy mill has a rated capacity of 1,000 tons and Geco's of 3,300 tons. Since the discovery of copper-zinc deposits in the area in 1953, two rail lines and a highway have been built into it and a modern mining community designed to accommodate 6,900 people is growing up at the Manitouwadge townsite.

Ontario is one of Canada's richest sources of iron ore. Production in 1956 increased 29 p.c. in volume and 17 p.c. in value over 1955 to 5,008,000 long tons valued at \$40,021,000. Production comprised direct shipping ore from Steep Rock Iron Mines Limited, iron sinter from Algoma Ore Properties Limited in northwestern and northern Ontario respectively, and pellets from Marmoraton Mining Company Limited in southeastern Ontario and from International Nickel's new plant at Copper Cliff in the Sudbury area. Shipments from Steep Rock increased from 2,266,000 long tons in 1955 to a new high of 3,317,000 long tons and came mainly from the Company's Hogarth open-pit mine. Steep Rock continued to carry out extensive development work on its orebodies as part of its development program to raise production to 5,500,000 long tons annually commencing in 1959 from both open-pit and underground operations. In the same area, Caland Ore Company Limited is preparing "C" orebody which it has leased from Steep Rock for production by 1960. Caland is looking to an ultimate annual output of 3,000,000 long tons which will bring shipments from the area to a minimum of 8,500,000 long tons by the mid-1960's and to 10,000,000 long tons a few years later.

Algoma Ore Properties Limited in the Michipicoten area produced 1,411,000 long tons of sinter in 1956, slightly less than in 1955, from its Helen and Victoria underground mines. About two-thirds of the siderite ore from the mines is direct sintering and one-third requires beneficiation in the sink-float plant at Jamestown before sintering. The Company is expanding its facilities at Jamestown and carrying out underground development to raise output capacity to 2,000,000 long tons annually by 1958. Marmoraton Mining Company Limited, a subsidiary of Bethlehem Steel Company of Bethlehem, Pennsylvania, shipped 283,000 tons of high-grade iron ore pellets in 1956 from its operations near Marmorata by rail to Picton and by boat to the parent company's steel plant at Lackawanna, New York. Early in 1956, International Nickel began the shipment of high-grade iron oxide pellets from its new \$19,000,000 iron-ore recovery plant near Copper Cliff, producing 71,000 long tons that year. At capacity operation, the plant will treat 1,000 tons of nickeliferous pyrrhotite a day for a production of 1,000,000 tons of pellets a year. Noranda Mines Limited operated its sulphur-iron plant at Port Robinson near Welland at about half capacity and produced 48,000 long tons of iron sinter. Exploratory activity during the period was carried out in various areas containing iron-bearing occurrences of possible commercial importance.

Uranium proved to be the real headline winner in Ontario's metal-mining industry during the review period. Two areas were under development, the Blind River area of northern Ontario and the Bancroft area in the southeastern part of the Province. Output rose from a value of less than \$500,000 in 1955 to almost \$6,000,000 in 1956 and was expected to exceed \$10,000,000 in 1957.