

March 1958. Campbell Chibougamau Mines Limited, on Merrill Island in Lake Chibougamau produced 13,883 tons of copper for the year ended June 30, 1957, and 5,636 tons during the last six months of the year. Other copper producers in the area were Opemiska Copper Mines (Quebec) Limited (8,555 tons), and Anacon Lead Mines Limited (942 tons). Elsewhere, Quebec Copper Corporation Limited in southeastern Quebec and Weedon Pyrite and Copper Corporation Limited south of Quebec City together produced some 4,000 tons of copper. (The former company closed its mine in April 1958.) Early in 1958 Merrill Island Mining Corporation, a copper-gold producer at Doré Lake, opened a 650-ton mill and Campbell Chibougamau opened its new Cedar Bay mine in the same area.

Hudson Bay Mining and Smelting Company, with a copper-zinc mine, concentrator and smelter at Flin Flon on the Manitoba-Saskatchewan boundary, produced 44,344 tons of copper in 1957. Sherritt Gordon Mines Limited, with two nickel-copper mines and a concentrator at Lynn Lake, Man., had an output of 4,748 tons.

Among British Columbia's producers in 1957 were The Granby Consolidated Mining, Smelting and Power Company Limited and Britannia Mining and Smelting Company Ltd., both of whose mines were later closed because of low prices. Several other properties in British Columbia also suspended operations.

Other copper producers in 1957 included: North Rankin Nickel Mines Limited, N.W.T., (265 tons), Buchans Mining Company, Nfld., (4,149 tons), and Maritimes Mining Corporation at Tilt Cove, Nfld. (3,142 tons). Early in the year Heath Steele Mines Limited, with a copper-lead-zinc property in New Brunswick, inaugurated a mine and plant rated at 1,500 tons of ore a day but a year later cut production by two-thirds.

Copper exploration and development were severely tempered in 1957 and 1958 by the uncertainty of the market. In British Columbia, Western Nickel Mines Limited opened a mill for nickel-copper concentrates early in 1958; Granduc Mines Limited continued to develop its property northwest of Stewart but, discouraged by low copper prices, stopped work early in 1958; and elsewhere in the province limited amounts of diamond-drilling were carried out. Hudson Bay Mining and Smelting Co. undertook development work at its Coronation mine in Saskatchewan and at its Chisel Lake and Stall Lake mines in Manitoba. Development work of interest also took place on nickel-copper properties at Thompson, Moak Lake, and Cat Lake, and in the Sudbury area (*see* Nickel). Most of the exploration interest in copper in 1957-58 centred about the Mattagami region of western Quebec where a number of promising finds were made including the copper orebodies of New Hosco Mines Limited and Kennco Explorations (Canada) Limited.

**Lead and Zinc.**—Canadian lead and zinc mining in 1957 and 1958 was seriously hampered by falling prices and by quotas imposed by the United States to hold its imports of lead and zinc to 80 p.c. of the 1953-57 average. In 1957 lead prices fell from 15½ cents a pound to 10½ cents; production dropped 4 p.c. in volume to 181,484 tons and 13.5 p.c. in value to \$50,670,407, with a further decline to \$42,095,560 in 1958. Zinc output in 1957 was 413,740 tons valued at \$100,042,533, a decline of 8,893 tons worth \$25,394,811 from the previous year. The estimated production for 1958 was 428,638 tons valued at \$93,100,167.

British Columbia's mines accounted for more than half of Canada's lead and zinc production in 1957-58. The principal producer was The Consolidated Mining and Smelting Company of Canada Limited (Cominco), operators of the Sullivan mine and 11,000-ton Kimberley mill, the Bluebell mine and 500-ton Slocan mill, the H.B. mine and 1,000-ton Salmo mill, and the Tulsequah mine and mill. Concentrates from all Cominco mines and those from other mines in British Columbia, Yukon and some foreign areas were treated in the company's smelter at Trail. In 1957 Cominco mined 3,273,613 tons of ore, about 378,000 tons less than the previous year, and by mid-year the declining base-metals market forced the company to close its Tulsequah mine and curtail its operations at the Sullivan open pit. By June 1958 Cominco had reduced its lead production rate about 20 p.c.