

dated's smelter at Trail. Other important British Columbia producers of lead and/or zinc in 1961 included Canadian Exploration, Limited and Reeves MacDonald Mines Limited, both near Salmo; Sheep Creek Mines Limited, west of Invermere; and Howe Sound Company, Britannia Division, north of Vancouver.

In Manitoba and Saskatchewan, Hudson Bay Mining and Smelting Co., Limited—the operator of the large Flin Flon mine, the Coronation and Schist Lake mines at Flin Flon, and the Chisel Lake mine at Snow Lake in Manitoba—was the only producer of lead and zinc. Some zinc was recovered along with copper from ores produced at all four mines; lead was recovered only from ore produced at the Chisel Lake mine, which commenced production in September 1960 at about 1,000 tons a day. All ores are concentrated in a central 6,000-ton mill at Flin Flon, to which a lead circuit was added in 1960. Zinc is recovered in the company's electrolytic refining plant, which has an annual productive capacity of 73,000 tons of refined zinc. The lead concentrate is shipped to a custom smelter.

Ontario's only production of zinc concentrates comes from copper-zinc mines operated by Geco Mines Limited and Willroy Mines Limited at Manitouwadge, north of Lake Superior. A small amount of lead concentrates was produced by Willroy. In January 1961, Sherbrooke Metallurgical Company Limited started continuous operation of a 150-ton-per-day zinc roaster at Port Maitland on Lake Erie.

Quebec's main source of zinc was copper-zinc ore from mines in the Noranda-Val d'Or area operated by Quemont Mining Corporation, Limited, Manitou-Barvue Mines Limited, Normetal Mining Corporation, Limited, Sullico Mines Limited (East Sullivan mine) and Waite Amulet Mines, Limited. In the same area, Vauze Mines Limited commenced production of copper and zinc concentrates in October 1961. At Bachelor Lake on the Barraute-Chibougamau railway in northwestern Quebec, The Coniagas Mines, Limited started production of lead and zinc concentrates in March. Other lead producers were Manitou-Barvue which produced some lead concentrate in addition to copper and zinc concentrates, and New Calumet Mines Limited whose lead-zinc-silver mine is 70 miles west of Ottawa.

The only large lead-zinc producer in the Atlantic Provinces was American Smelting and Refining Company which operates a mine at Buchans, Nfld. Late in 1961, Magnet Cove Barium Corporation commenced production of a bulk concentrate containing lead, zinc, copper and silver at Walton, N.S.

Exploration and development activities in 1961 were confined mainly to the Noranda and Mattagami Lake areas of northwestern Quebec, Wolfe County in the Eastern Townships of Quebec, and the Bathurst area of New Brunswick. In the Noranda area, Vauze Mines Limited did some underground exploration and development before starting production in October. Late in the year, Lake Dufault Mines Limited commenced diamond-drill exploration on its property adjacent to Vauze Mines. In the Mattagami Lake area, Mattagami Lake Mines Limited did extensive underground development and Orchan Mines Limited started shaft-sinking. Solbec Copper Mines, Ltd. prepared its property in Wolfe County for production of copper, zinc and pyrite concentrates early in 1962. Some exploration was done on lead-zinc properties in the Bathurst area by several companies including Anaconda Company (Canada) Ltd., Anacon Lead Mines Limited, Brunswick Mining and Smelting Corporation Limited, The Consolidated Mining and Smelting Company of Canada Limited, and the New Jersey Zinc Exploration Co. (Canada) Ltd. Preparations were made by Heath Steele Mines Limited to commence milling of copper-zinc ores early in 1962; Heath Steele formerly operated its mine for about 12 months during 1957-58.

Silver.—Production of silver in Canada during 1961, estimated at 31,981,210 oz.t. and valued at \$30,068,733, was considerably lower than the record output of 34,016,829 oz.t. in 1960 valued at \$30,244,363. Ontario, the largest producer, registered a decline of about 2,000,000 oz.t. Ontario, British Columbia and Yukon Territory account for four-