Mine production increased to 366 000 t in 1978 from 327 593 t as producers took measures, where possible, to take full advantage of the positive conditions for lead. Producers recorded a strike-free year with few technical production problems. There were 22 mines supplying lead-bearing ore to 19 mill facilities with a combined capacity of 71 250 t of ore a day.

The Buchans mine of ASARCO Inc. in central Newfoundland was approaching the end of its reserve life and was expected to close in 1980.

In New Brunswick the \$53 million expansion program at the No. 12 mine of Brunswick Mining and Smelting Corp. Ltd., deferred in 1977, was rescheduled for completion in 1980. The expansion will increase production capacity of lead-in-concentrate from 78 000 to 87 000 t a year. The company's No. 6 mine which began its underground phase in 1977 closed in late 1979 upon exhaustion of reserves.

Lead production in central Canada is a byproduct of copper-zinc mine production. Quebec has one lead-producing mine. Four are located in Ontario but they account for only 3% of Canada's output. Production from the Lyon Lake ore zone of Mattagami Lake Mines Ltd., deferred in 1977, was rescheduled to commence in 1980.

The H.B. mine of Cominco Ltd. was closed on September 1, 1978 due to exhaustion of reserves. Other production was normal although favourable lead zones at the Sullivan mine of Cominco allowed an increase in concentrate production over 1977 levels.

In the Northwest Territories production from both Pine Point Mines Ltd. and Nanisivik Mines Ltd. compared favourably with 1977 levels.

Negotiations continued throughout 1979 between Cominco Ltd. and the federal government concerning the development on the Polaris project on Little Cornwallis Island in the high Arctic. A deposit contains 22.7 million tonnes grading 14.1% zinc, 4.1% lead and 34 g (grams) of silver a tonne. If a favourable decision is taken the project could be on stream by the mid-1980s with annual output of about 25000 t of lead contained in concentrate.

The Foreign Investment Review Agency gave approval in November 1978 to a West German proposal to establish a new secondary lead plant near Montreal. The 35 000 to 40 000 tonne-a-year plant, to cost about \$14 million and employ 200 persons, was expected to come on stream in December 1979.

12.3.7 Silver

Canada's mine production of silver in 1978, more than 1.2 million kilograms, was 108 000 kg less than 1977. Canada was the world's third largest mine producer of silver, surpassed by Mexico and the USSR. Other major producers were Peru and the United States.

Lower mine production of silver from base-metal ores in Ontario and British Columbia accounted for most of the decrease. Silver output in New Brunswick, recovered mainly from base-metal ores, increased 17.8%.

Ontario was the leading silver-producing province with output in 1978 accounting for about 35% of Canadian mine production. The largest producer in Canada was Texasgulf Canada Ltd., which recovered over 243 400 kg of silver in copper, lead and zinc concentrates at its Kidd Creek mine near Timmins, Ont.

In the Prairie region much of the silver came from nine base-metal mines operated by Hudson Bay Mining near Flin Flon and Snow Lake, Man. Most of the remainder was derived from the Fox and Ruttan copper-zinc mines operated by Sherritt Gordon Mines Ltd. at Lynn Lake and Ruttan. Man.

Base-metal ores continued to be the main source of British Columbia's mine production of silver. Cominco, the province's major producer, recovered silver from the lead-zinc-silver ores of its Sullivan mine in southeastern British Columbia and from purchased ores and concentrates.

Silver production in the Northwest Territories was higher in 1978 mainly because of greater output by Terra Mining and Exploration Ltd. which operates a silver-copper property near Port Radium on the east shore of Great Bear Lake. Other producers were Echo Bay Mines Ltd. which also operates a silver-copper mine near Port Radium and the base-metal mine of Nanisivik Mines Ltd. at Strathcona Sound on Baffin Island.