

medium-grade direct shipping iron ore in the Steep Rock Lake area announced plans to build a 1,000,000-ton-a-year pellet plant to pelletize the screened fines from its 2,500,000-ton-a-year operation.

The more notable mineral developments of 1963 in the four western provinces included the first year of major production of potash in Saskatchewan, with output amounting to an estimated 1,000,000 tons. Output of elemental sulphur in Alberta and British Columbia from the processing of natural gas increased greatly and there was a much-improved sulphur market in Canada, the United States and across the Pacific. The year-end production target of 800,000 bbl. a day of crude petroleum and natural gas liquids was reached. Steady gains were recorded in natural gas production and consumption. The mining industry maintained a high rate of activity in exploration and development of iron ore and base-metal properties, with several mines commencing production.

Canada can look forward with much assurance to continuing expansion of its mineral resource base and steady production growth; its prominent position as a world mineral producer will thereby be maintained and, perhaps, even enhanced. There are many projects under way, both large and small in the three sectors of the industry, which will result in higher output and greater production-diversification. There is, happily, no feeling of self-complacency over past achievements in the industry but rather one of expectancy concerning future major developments. The important base metals discovery made in early 1964 by Texas Gulf Sulphur Corporation in the Timmins area of Ontario gave a great impetus to mineral exploration. Much of the country's favourable mineral-bearing lands, particularly in the northern two thirds of the country, remain unexplored and there is no reason to believe that these areas will be any less productive in mineral wealth than the southern third.

Subsection 1.—Metals

Nickel.—Canadian nickel production during 1963 was 218,649 tons valued at \$362,781,957, slightly less than in 1962. The industry operated at about 93 p.c. of its rated capacity. Canada is traditionally the world's leading supplier of nickel and accounts for about 80 p.c. of Free World production. The leading producers—The International Nickel Company of Canada, Limited and Falconbridge Nickel Mines, Limited—are the world's largest.

Near Sudbury, Ont., International Nickel operated six mines—the Creighton, Froid-Stobie, Garson, Levack and Murray underground mines and the Clarabelle open pit. Also near Sudbury, Falconbridge operated five mines—Falconbridge, East, Hardy, Onaping and Fecunis. As a result of a production cut, the East mine was closed and production was reduced at the other four mines. The company completed and opened a \$1,000,000 addition to its research centre at Thornhill, Ont.

In Manitoba, the Lynn Lake mine of Sherritt Gordon Mines Limited operated at capacity though at slightly lower grade than in 1962. It had a good market for its nickel products sold in briquette and powder forms. The only major change at the Thompson mine of International Nickel was the decision to sink a service shaft at a location on the edge of Thompson Lake.

Several smaller nickel mining operations made good progress in 1963. The Gordon Lake mine of Metal Mines Limited in northwestern Ontario began production with a mill designed to treat 500 to 700 tons daily, although difficulties were experienced in reaching capacity because of poor ground conditions in the mine. A bulk nickel-copper concentrate is trucked to Lac du Bonnet, Man., and shipped to Copper Cliff, Ont., for smelting. The Marbridge Mines Limited mine in La Motte township, Que., was operating at close to its daily capacity of 400 tons. Bulk nickel-copper flotation concentrates, amounting to about 2,800 tons a month, are trucked to Falconbridge, Ont., for smelting. Lorraine Mining Company was shaft sinking to 1,000 feet on its property in the Belleterre area of Quebec. Indicated ore reserves to 800 feet are 550,000 tons of 2.1 p.c. combined nickel-copper. Giant Mascot Mines Limited, near Hope, B.C., treated about 1,200 tons of ore