tonnes. The plant treats a blend of 85% blue ore and 15% yellow ore from the Schefferville area.

La Société de Développement de la Baie James (SDBJ) continued drilling on its property at Lac Albanel, Que. Reserves stood at over one billion tonnes of magnetite ore grading 31% iron. This would permit production of 9 million tonnes a year of pellets and concentrates for a period of 30 years. SDBJ intends to start production between 1985 and 1990.

In Ontario, areas that attracted recent attention were Lake St. Joseph, Geraldton–Nakina and Bending Lake. Because of their location, Algoma is the steel company in Canada most likely to show interest in their development. In 1976, however, nothing was done on the Lake St. Joseph property and not much was expected to be done for the next couple of years due to escalation in construction costs, less growth than expected in the steel industry in North America and investments by Algoma in the Tilden mine in the United States. Metallurgical work continued on the Geraldton property but at a reduced rate.

Jointly with Algoma, Steep Rock Iron Mines Ltd. studied the possibility of developing the Bending Lake iron ore deposit, 25 kilometres northwest of Atikokan. The ore at Bending Lake consists of magnetite grading 20% iron and reserves are sufficient to sustain a mining operation for 20 years. The ore would be mined by open-pit methods, concentrated at Bending Lake and shipped by rail or pipeline to Atikokan for pelletizing.

In 1976 a direct-reduction plant of STELCO at the Griffith mine operated from January to March. The plant then closed because of operating problems. During that period it operated at 80% capacity and produced almost 30 000 tonnes of sponge iron. The plant reopened later but was shut down completely in August. The plant has a rated capacity of 400 000 tonnes of sponge iron a year using a mixture of coal and iron pellets to produce sponge iron.

A direct-reduction plant of Sudbury Metals at Falconbridge, Ont., owned by Allis-Chalmers Corp. and National Steel Corp., officially opened May 12, 1976. But the plant was shut down in October following an explosion that occurred while it was not in operation. The plant has a designed capacity of 275 000 tonnes of sponge iron a year. It uses INCO oxide pellets as feed material and oil and gas as a reductant.

In British Columbia, Texada Mines Ltd. ceased operations at its iron ore mine near Gillies Bay, Texada Island, on December 17, 1976, when ore reserves were exhausted. Texada Mines started production in 1952 and at the end of 1976 had produced 10.5 million tonnes of concentrates. All of Texada's production was sold to Japanese consumers. The mine closure resulted in the loss of 180 jobs.

Other developments in the iron ore industry in Canada were as follows: the transport department investigated the possibility of increasing tolls on the St. Lawrence Seaway and Welland Canal; metallurgical work was conducted by the Canada Centre for Mineral and Energy Technology (CANMET) laboratories in Ottawa on iron material from the Peace River area of Alberta. The metallurgy of this material is complex as it has a high content of silica, phosphorus and sulphur; Combustion Engineering Ltd. investigated the possibility of using coal in pelletizing plants as a substitute for oil and gas; Campbell Chibougamau Mines Ltd. started a preliminary market study for production of pellets from an iron ore deposit located near Chibougamau, Que. The pellets to be produced would have a high titanic content of 1.0%; Canadian National and Canadian Pacific railways were studying the possibility of using hydroelectric energy rather than oil in transporting iron ore from the Quebec–Labrador region.

12.3.2 Nickel

Canadian production of nickel in 1976 amounted to 262 492 tonnes valued at $1.23 billion. World production of nickel increased 4.9%; Canadian production decreased 1.0% because of lower production rates instituted in 1975. Consumption of nickel in the non-communist world was about 496 700 tonnes compared with about 408 600 tonnes in 1975, when one of the sharpest declines in consumption in the history of the industry was recorded. Producer stocks rose to about three times normal at the end of the year.