## Supply-Mines and Technical Surveys

ating rates in the United States during the latter half of the year. Shipments to the United Kingdom and western Europe increased both in tonnage and in value in 1960 over those of the previous year. There are several iron ore deposits of large tonnage being developed for production in Quebec-Labrador with the first of these-Quebec Cartier Mining Company's eight million ton a year capacity operation in Quebec-expected to begin shipments from Port Cartier in June. Market patterns for iron ore are changing each year, with increasing competition from South American and African iron ores on a price-quality basis. It is of interest to note that shipments to Japan from British Columbia deposits passed the one million tons a year mark for the first time in 1960. The potential market for iron ore in Japan is large, and shipments from western Canada are expected to increase steadily.

The continuing lead and zinc import quotas imposed by the United States government on September 22, 1958 tend to have a restraining influence on the production of these commodities both in Canada and other major producing countries. Canada is well represented on the international lead and zinc study group which held its third meeting at Mexico City from March 20-24. Several major projects to develop substantial deposits of lead-zinc ores are progressing. The government is surveying a railway route from Grimshaw, Alberta, to Pine Point, Northwest Territories, where large lead-zinc deposits await development. Mention has already been made of a railroad nearing completion to the Mattagami lake area of Quebec, where several properties are nearing the production stage. There has also been renewed interest in the deposits in the Bathurst area of New Brunswick. It is hoped that an announcement will soon be made that an electrolytic zinc refinery will be built in Quebec to treat zinc concentrates from mines in eastern Canada.

Since 1953 crude petroleum has been the largest single contributor to Canada's mineral output, with production in 1960 being valued at nearly \$433 million. The highlight of this segment of the mineral industry was the recent announcement of the government's national oil policy, which called for oil production to reach 625,000 barrels a day by June, 1961, with an average production of 640,000 barrels a day for the whole year. It appears that average daily production for the first six months of the year will be about 594,000 barrels with a monthly high in May or June of about 640,000 barrels a day.

[Mr. Comtois.]

those of the previous year. The decline was due mainly to the relatively low steel operating rates in the United States during the latter half of the year. Shipments to the United Kingdom and western Europe increased both in tonnage and in value in 1960 over those of the previous year. There are several iron ore deposits of large tonnage being developed for production in Quebec-

> In the natural gas industry the highlight of the past year was the approval by government agencies in Canada and United States of large scale exports of natural gas from western Canada to the growing markets of the United States west coast and mid-west. This, of course, precipitated an extensive program of building transmission pipe lines to carry the gas. This, in turn resulted in a considerably increased tempo of activity by manufacturers of steel pipe. Natural gas production in 1960 increased 20.5 per cent over that of 1959 to more than 500 billion cubic feet valued at over \$48 million. Despite this record production, proven reserves of natural gas at the end of 1960 had increased over 15 per cent from a year earlier to more than 30 trillion cubic feet.

> The combined total value of crude petroleum, natural gas and liquid hydrocarbons showed a growth for 1960 of 5.4 per cent over the 1959 value of production, a most gratifying rate of growth for an industry which is undergoing a rationalization period subsequent to a growth of productive capacity in the 1950's far in excess of the ability of the domestic and export markets to consume. In a world of energy minerals oversupply, both industry and governments will be faced in the 1960's with the necessity of bringing exploration, development, production and conservation programs more in line with market availability and consumption growth.

> The situation in respect to that other important energy mineral, coal, is well known. Suffice it to say that the present difficulties the industry is facing are largely the result of competition from petroleum, natural gas, and surplus hydroelectric power. In Nova Scotia, coal's difficulties are compounded by high production costs and the ageing condition of the mines. However, more will be said of this matter when I present the estimates of the dominion coal bcard.

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