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Lively progress for Canadian mining

A steady pattern of growth has characterized the mining industry in recent years and 1980 proved to be no exception.

General economic indicators pointed to a year of slow growth with the US recession having a big impact on Canadian industry. But the mining industry pushed ahead regardless — carrying on with massive expansion programs and announcing new developments across the country.

The trend in the provinces hasn't changed much from previous years, with copper projects leading the way in British Columbia, and uranium and potash continuing strongly in Saskatchewan. Golds were in the forefront in Ontario and Quebec with a lot of old-timers making comebacks.

Total capital requirements of the non-fuel mineral industry from 1980 to 1990 according to the Department of Energy, Mines and Resources will be more than \$42-billion, roughly 6% of total business investment in that period. In current dollars, assuring an average rate of price increase of 6.2% annually over the ten-year period, this \$42-billion mushrooms to \$63.5-billion.

While activity in the minerals sector is providing significant stimulus to the Canadian economy in general, problems with taxes, excessive regulations, rising costs and lack of skilled labour still cloud the future. The softer prices for many metals in the latter half of 1980 may have dampened prospects for some potential new mining projects, but on the whole, the industry is healthy and the outlook is good.

A brief survey covering new Canadian mine developments and major expansion follows. Refer to similar article in *Western Miner* Dec '79 for additional information on many of the on-going projects.

BRITISH COLUMBIA

Prominent in the expanding mining industry are developments in British Columbia. Here, capital expenditures exceeding \$700-million in the next few years are slated for the Highland Valley region alone.

The \$150-million Highmont project of Teck Corporation will come on-stream late in December 1980 at a rate of 25,000 tons/day and Cominco Limited's 85%-owned Valley Copper Mine is expected to be placed in production at a

cost of \$400- to \$500-million. Cominco's recent purchase of a controlling interest in Bethlehem Copper Mines (raising its equity from 39% to 65%) paves the way for a production decision on the 112,000 tonnes/day project. (Bethlehem has a 5.1% interest in Valley Copper Mines and a 20% interest in the Lake Zone deposit which straddles the Bethlehem-Valley border.)

Nestled between these two, another copper giant Lornex Mining Corporation is spending \$160-million on an expansion program to increase its daily milling rate from 40,000 to 80,000 tons/day by July 1981.

Elsewhere in the province, several new mine projects are making headway. Amax of Canada Limited is spending \$145-million to reopen its open pit molybdenum mine near Kitsault by July 1981. Throughput will be 12,000 tons/day.

Equity Silver Mines' 107-million Sam Goosley project near Houston came on-stream in September at a rate of 5000 tons/day. Owned 70% by Placer Development, the mine will produce 5,680,000 oz silver, 14,109,000 lb copper and 10,900 oz gold annually.

A new mine announcement in 1980 came from Noranda Mines Limited which intends to develop a copper-zinc mine in the Goldstream Valley, 80km north of Revelstoke. Estimated to cost \$62-million, the mine will begin producing 75,000 short tons of copper concentrate and 11,600 short tons of zinc concentrate annually starting in the third quarter of 1982.

The former Granduc Copper mine was reopened in October by Canada Wide Mines Limited, a subsidiary of Esso Minerals Canada. The company spent \$20-million to rehabilitate the mine, which will treat 4000 tons/day.

Among the golds, Carolyn Mines Limited and its joint venture partners the Aquarius Group expect production early 1981 from their \$20.4-million Ladner Creek gold project near Hope. The mill will treat around 1500 tons/day.

Du Pont of Canada Exploration is spending \$12-million to place its high grade Baker gold-silver property at Chapelle into production early 1981, at 100 tons/day. And Scottie Gold Mines, managed and controlled by Northair Mines, secured a \$15-million financing to bring its property near Stewart on-stream by 1981.

The 200 ton-day operation will produce 4500 oz gold and 2800 oz silver per month when in full production.

Spiralling prices for precious metals prompted several junior companies to enter producing ranks with small-scale operations, some using small portable mills to process the ore.

In the Cassiar area, a 150-ton mill is being built by United Hearne Resources (60%) and its partner Taurus Resources (40%), while Cusac Mines has plans for a 30-50 ton/day portable mill on its property in the same area. One producer already in the area, Nu Energy Development is expanding its joint venture Erickson gold mine from 100 to 200 tons/day at a cost of \$450,000.

Mosquito Creek Gold Mining Company and its partner Peregrine Petroleum poured the first brick at their 100 ton/day gold mine near Wells in May 1980. The Boundary Falls gold-silver property of Robert Mines was scheduled to come on-stream in the fall at the same rate and British Silbak Premier is resuming production at 100 tons/day at its gold-silver property near Stewart. A lead-silver-zinc mine south of Golden is being brought back to life by Ruth Vermont Mines. The company plans a 500 ton/day operation beginning April 1981.

DeKalb Mining Corporation, a wholly-owned subsidiary of DeKalb AgResearch Inc of DeKalb, Illinois reopened the O K copper mine in the Highland Valley in 1980, renaming it the Highland Valley mine. Milling capacity at the trackless underground operation is 700 to 800 tons/day for annual production of 11-million lb copper, 200,000 oz silver and 3300 oz gold.

Several major expansions were carried out during the year. In the Kootenay area, Cominco Limited is moving ahead with its \$420-million, eight-year expansion and modification program at Kimberley and Trail (the program began in 1977). A new zinc pressure leach plant was officially opened in October.

At Newmont Mines Limited's Silkameen Division, a \$23.4-million project was completed. The work included installation of a new primary crusher and conveyor to transport ore from the Copper Mountain orebodies starting July 1981; the same time as the Ingerbelle ore is

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92I/17
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Noranda Mines continued its \$19-million project at the Bell Copper Division near Granisle, seeking to expand mill throughput from 15,000 to 17,000 tons/day by 1981. Despite lower molybdenum prices, a \$12.5-million program was announced at its Boss Mountain molybdenum mine, near 100 Mile House, which will increase mill rate from 1800 to 3000 tons/day by early 1982. 92K 13E

Placer Development completed work to increase molybdenum output by more than 300,000 lb annually at its Endako mine. The \$12.5-million project included expanding the rougher flotation circuit, adding a new roaster and a new plant to produce lubricant-grade molybdenum. A \$40-million program at Placer's Gibraltar mine to prepare the Gibraltar East orebody for Stage Two mining was also completed, facilitating transfer of mining from the Pollyanna pit. 93B 17W
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