R. V. KIRKHAM

## EDITORIAL COMMENT

### Lornex

On August 1, 1972, Lornex Mining Corporation officially commenced production at its Highland Valley' copper-molybdenum mine. With concentrator capacity rated at 38,000 tons per day, Lornex has joined the impressive list of important new British Columbia mines that have been brought to production during the past decade. Like Gibraltar and Island Copper, Lornex ranks with the largest mining operations in Canada and will undoubtedly make another significant contribution to the economic well-being of this country. To quote from some recent remarks by Mr. Robert D. Armstrong, president and chief executive officer of Lornex (and president of the principal Lornex shareholder, Rio Algom Mines Ltd.):

"The development of Lornex has been a major Canadian undertaking. It has involved a massive capital investment, the full application of the talents of experienced professionals who have come to Lornex from Canada and other countries, and, during the peak of construction it entailed the employment of more than 1,500 men at the site. It is a source of great satisfaction to all who have been involved in this project that it has been brought successfully to this point and that it is now about to enter its productive period."

Canadians in all walks of life and in all areas of this country will agree with Mr. Armstrong. They will appreciate and share with him the satisfaction and gratification attending the successful completion of a major construction and mine-preparation project. And they will realize that the new wealth, the continuing employment, the substantial tax revenues, and the many other direct and indirect benefits generated by Lornex will be shared by and enjoyed by all Canada.

Lornex, to achieve production, required massive capital investment. Total capital expenditures to this date are estimated to be in the order of \$145,000,000 — a figure that clearly demonstrates the capability and the courage of those who conceived, directed and successfully completed this great project. It has become fashionable in some government and political circles to recommend a switch in emphasis from the resource industries to manufacturing and other secondary industries. The proclaimed rationale is that the resource industries, and particularly mining, are capital intensive and do not provide employment as compared to the labour-intensive manufacturing sector. Government acceptance of this doctrine has resulted in elimination, or drastic reduction of incentives for

continued growth of the mining industry, an increased tax burden, and discouragement of essential capital inflow. Currently, hundreds of millions of tax dollars are being distributed to create and expand secondary industries regardless of whether these federally subsidized businesses are, or ever will be, economically viable.

Mines such as Lornex offer very convincing evidence to refute the arguments against continued incentives for expansion of primary industries in Canada. During the peak period of mine development and plant construction employment at high wages was provided for almost 2,000 people. Except for the employment opportunities provided by Lornex, it is doubtful whether most of these would have found other acceptable employment during the past two or three years, at least not in British Columbia where the jobless rate has been higher than the national average. Even more important, Lornex can be expected to provide steady employment at very good wage rates over at least the next 20 years for some 500 to 600 workers. For 1971, average wages and benefits per employee in the British Columbia mining industry were \$10,986. Applying the "multiplier effect", Lornex will also provide employment for an additional 1750 to 2100 employees in British Columbia. Or, applying the "multiplier effect" on a national basis, Lornex can be expected to support eight other workers in Canada for every worker directly applied. This means that in addition to its own employees, Lornex can be expected to generate employment for some 4,000 to 4,800 persons in other sectors of the Canadian economy. On this basis one may well ask what the federal government has to offer as an acceptable, job creating alternative to new mine development. Certainly, in a resource-based economy such as that of British Columbia the paramount employment-creating potential remains in the forest and mining industries.

The story of Lornex from the early struggles of prospector Egil Lorntzsen to the completed project is told in following pages. Western Miner gratefully acknowledges the friendly co-operation and assistance of the entire Lornex organization in making this valuable information available to its readers. It is a record of accomplishments that have in great part been achieved because of the vision and determination of those who had a part in bringing Lornex from a raw and low-grade prospect to a great mining operation. May the fullest measure of success now reward their efforts!

either the problem in balance or how much they are personally responsible.

"Using pollution inventories on a national and personal basis an attempt has been made in this short article to provide answers to these pressing questions".

Information Circular IC 268 was prepared by E. R. Mitchell, head of the Canadian Combustion Research Laboratory, Fuels Research Centre, Ottawa.

# Inventories of National and Individual Air Pollution

Information Circular IC 269 is another in the series of publications of the Mines Branch Program on Environmental Improvement. The author, E. R. Mitchell, offers the following abstract:

"Advances in combustion tech-

nology have reduced pollution emission at individual fuel-combustion and process sources. Other technological advances have made available a wide array of new luxuries, goods, and services which are within economic reach of most people and this, together with population and industrial growth, has resulted in more fuel use per capita and more air pollution.

"This article explains these trends and attempts to illustrate the magnitude of the problem by presenting inventories of air pollution on both a national and an individual basis."

Available from Information Canada at a cost of 50c per copy.

#### White Paper on Japan's Natural Resources

The government of Japan has published a White Paper on Natural Resources. The report is reprinted from

"Trade and Industry of Japan — 1972", which is published by the Japan External Trade Organization.

It represents the first official attempt by the Ministry of International Trade and Industry to compile a comprehensive analysis of Japan's resource problems and some of the future government policies that can be expected.

The Japanese economy has been expanding at an unprecedented tempo until recently. This remarkable economic growth has been supported by massive imports of natural resources. Canada is in the forefront of suppliers of natural resources to Japan and exporters will accordingly be interested in the publication.

To receive a copy apply to I. Sasabuchi, Executive Director, The Japan Trade Centre, 151 Bloor St., W., Toronto, Ont., or N. Kinoshita, Representative, Japan External Trade Organization, Suite 916, 510 W. Hastings St., Vancouver 2, B.C.

## LORNEX ACHIEVES HIGH RECOVERY

Lornex Mining Corporation treated an average of 29,244 tons of ore per day during the last week of June. Millheads averaged 0.462% copper and recovery was 87.4%. The first shipment of Lornex concentrate was made on July 11, 1972, when 14,245 dry metric tons containing 9.9 million payable pounds of copper were loaded at Vancouver for transport to Japan.

In a review of Lornex operations August 14, R. D. Armstrong, president, advised that the mill had experienced some mechanical malfunctions in its early stages; a situation anticipated in achieving the ore blend for autogenous milling. Almost the entire month of July was lost when a strike was declared on July 3. Operations was resumed July 31 after an agreement had been ratified by the union membership.

The president states:

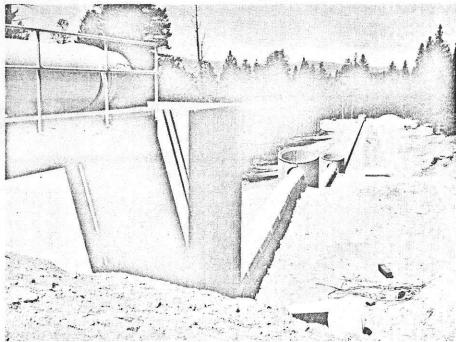
"Under the terms of the company's loan agreements the date of commercial production is August 1. Not production revenue prior to that date is applied in reduction of capital costs. As a consequence of the strike, there will be virtually no credit for July. Also, the operating results for the third quarter will be lower than would otherwise have been the case, since the strike interrupted the milling-rate increases that were being achieved.

"Because of these delays and interruptions, low labour productivity, and high overtime costs during the final stages of construction there will be a relatively minor increase in the final capital cost of the project over the estimate of \$138 million previously reported. In accordance with the supplementary financing provisions of the

construction and management agreement, the additional funds will be provided by Rio Algom Mines Limited, through purchase of units consisting of income debentures and shares, when the amount is determined."

\$21,687,000 including accrued interest. Total capital expenditures to June 30, 1972, including accrued interest, financing expense, and exploration expense, and after deduction of receipts from sales of townsite property, were \$142,715,000. Total cash cost to June 30 was \$136,877,000. Development and construction commitments at June 30 were \$2,511,000.

Early in 1972, Lornex received a formal request from the Japanese purchasers for revision of certain terms of the copper-concentrate sales contract. On March 28, 1972, the Canadian Government asked all Canadian producers to refrain from making any amendments to established legal obligations with Japanese purchasers until April 30, 1972. The Lornex company complied with the government's request, and having been subsequently released from such restraint, resumed negotiations with the Japanese purchasers on May 23. Mr. Armstrong reports that several meetings have since taken place but no conclusions have yet been reached and negotiations are still in progress.



First section of Lornex tailing conveyance is through 4800 feet of 36-inch asbestoscement pipe for a decline of 147 feet