

LORNEX  
Annual Report 1980







# Lornex Mining Corporation Ltd.

## Directors

G. R. Albino,  
*Mississauga, Ontario*  
The Hon. Robert Andras, P.C.,  
*Vancouver, B.C.*  
R. D. Armstrong,  
*Don Mills, Ontario* <sup>(1)(2)</sup>  
J. Ian Crookston,  
*Toronto, Ontario* <sup>(1)(2)</sup>  
J. G. Edison, Q.C.,  
*Toronto, Ontario* <sup>(1)(2)</sup>  
A. Fujisaki,  
*Tokyo, Japan*  
R. E. Hallbauer,  
*Vancouver, B.C.*  
L. H. Hunter,  
*Logan Lake, B.C.*  
N. B. Keevil, Jr.,  
*Vancouver, B.C.*  
D. S. R. Leighton,  
*Banff, Alberta* <sup>(1)</sup>  
A. F. Lowell,  
*Islington, Ontario*  
H. A. Pakrul,  
*Vancouver, B.C.*  
J. Van Netten,  
*Willowdale, Ontario*  
*Honorary Director*  
E. H. Lorntzen,  
*Vancouver, B.C.*

(1) Member of the Audit Committee  
(2) Retiring from the Board

## Officers

R. D. Armstrong,  
*Chairman and Chief Executive Officer*  
G. R. Albino,  
*President and Chief Operating Officer*  
L. H. Hunter,  
*Vice-President, General Manager*  
J. Van Netten, *Treasurer*  
C. W. M. Burge, *Secretary*  
J. R. MacDonald, *Controller*

## Head Office

Suite 510  
580 Granville Street,  
Vancouver, B.C.  
V6C 1W8

## Mine Office

P.O. Box 1500,  
Logan Lake, B.C.  
V0K 1W0

## Auditors

Coopers & Lybrand,  
Vancouver

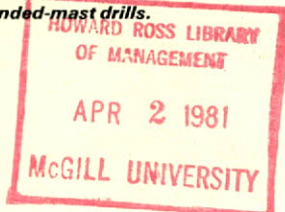
## Registrar and Transfer Agent

National Trust Company,  
Limited, Vancouver

## Shares Listed

Vancouver Stock Exchange

**Cover: Final check is made  
of 170-ton-capacity truck  
before it goes into service  
at Lornex. New equipment  
includes 22 of these trucks,  
three 22-yard shovels and  
three extended-mast drills.**



## The Annual General Meeting

11:00 a.m., Tuesday,  
April 21, 1981  
Shuswap Lake Room,  
The Four Seasons Hotel,  
791 West Georgia Street,  
Vancouver, B.C.







## Directors' Report to the Shareholders

Net earnings for the year 1980 were \$65.1 million (\$7.87 per common share) compared to \$57.6 million (\$6.96 per common share) in 1979. They were the highest in the Corporation's history, representing an increase of 13% over the previous year's record high level.

Dividends totalling \$33.1 million were paid in 1980 compared to \$16.5 million in the previous year. These comprised a dividend of \$1.00 per common share paid on May 30, 1980, and a dividend of \$1.00 per common share plus an extra dividend of \$2.00 per common share paid on November 28, 1980.

### Financial

Net revenue from mine production was \$173.7 million in 1980 compared to \$190.6 million in the previous year. Earnings before taxes were \$108.9 million compared to \$125.9 million in 1979. The decreases in net revenue and earnings before taxes were primarily due to a lower price realized for molybdenum, reduced copper production and increased operating costs. These unfavorable factors were partly offset by higher prices realized for copper and silver, a significant increase in

investment income and higher production of molybdenum.

Income and mineral resource taxes of \$43.8 million were charged against earnings in 1980 compared to \$68.3 million in the previous year. The decrease is attributable to lower pre-tax earnings and to greater deductions allowed for tax purposes mainly arising from the substantial increase in capital expenditures for the expansion of facilities.

The gross revenue price realized per payable pound of copper, including foreign exchange gains, averaged Canadian \$1.15 in 1980 as compared to Canadian \$1.06 in 1979. London Metal Exchange prices averaged under U.S. \$0.93 for the last nine months of the year. Molybdenum prices drifted steadily downward from the beginning of the year. The gross revenue price per payable pound of molybdenum, including foreign exchange gains, averaged Canadian \$10.05 in 1980 as compared to Canadian \$16.65 in the previous year.

### Capital Expenditures

Net capital expenditures in 1980 were \$95.8 million compared to \$8.7 million in the previous year. The

*Lornex mill under expansion. The new section now houses additional autogenous grinding and ball mills, flotation cells, control computers and other equipment that will increase the plant's capacity by 68 per cent.*



*Steel being erected for expansion of Lornex mine maintenance building. The addition will enable the facility to handle the expanded array of trucks, shovels and other equipment.*



*Big bite is taken by 22-yard shovel in the Lornex pit. Haulage volume will increase to 95 million tons of ore and overburden per year as a result of current expansion.*



1980 total comprises \$84.7 million for expansion of mining and milling facilities, \$3.3 million for the molybdenum leach plant and \$7.8 million for normal equipment replacements. At December 31, 1980 an additional \$25.2 million had been committed.

Expansion of facilities, estimated to cost \$160.0 million and construction of a molybdenum leach plant, estimated to cost \$6.6 million, are proceeding as planned for completion in mid-1981. The expanded facilities, which will increase production capacity by about 68%, will include a third slightly larger semi-autogenous mill line, a new crusher and ore conveyor system, 18 new 170-ton trucks, 3 new 22-cubic yard shovels, an additional tailings line and related facilities as well as additional housing at Logan Lake. It is expected that the cost of the expansion will be slightly lower than originally estimated. The expansion is being funded out of general funds of the Corporation and will be supplemented by temporary bank borrowings if necessary. The expanded plant will be one of the most modern and efficient mining and milling operations in the world.

### Operations

Tonnage milled was slightly lower in 1980. Molybdenum production was 8.5% higher this year while copper production declined by 6%. Molybdenum recovery increased partially as a result of the cleanup in January, 1980 of the filter cake stockpile which built up while the molybdenum drier was down for scheduled repairs in December, 1979.

The comparative milling, metallurgical and production data for the years 1980 and 1979 follows:

	1980	1979
Tons of ore milled (thousands) . . . . .	17,678	17,776
Average tons milled per operating day	48,302	48,701
Average mill head grade		
— copper . . . . .	0.411%	0.432%
— molybdenum . . . . .	0.017%	0.017%
Average mill recovery		
— copper . . . . .	89.8%	90.2%
— molybdenum . . . . .	81.4%	75.1%
Payable metal in concentrate produced (thousands)		
— copper (pounds) . . . . .	126,346	134,194
— molybdenum (pounds) . . . . .	4,813	4,436
— silver (ounces) . . . . .	507	487
Pounds of payable metal in concentrate delivered (thousands)		
— copper . . . . .	135,298	129,632
— molybdenum . . . . .	4,790	4,541

The average operating cost per ton of ore milled increased to \$3.13 in 1980 from \$2.65 in 1979. The main reasons for the increase were the wage contract settlement in mid-year and the higher cost of fuel and power; increases in the cost of high usage materials such as grinding media and mill liners were also significant. Expenditures for raising tailings dams were higher than in the previous year.

Environmental controls and a reclamation program are performed by the Corporation under permits issued by Ministries of the Province of British Columbia. The results of tests reported in respect of pollution control, including monitoring of surface and underground water and air emissions, are supervised by an independent consultant. A reclamation program has been designed so that, after cessation of activity, land which has been disturbed can be developed to ensure that its use and appearance will be compatible with the surrounding area; short and long range goals also provide for the prevention of erosion and protection of water courses. Work includes experiments with plant species and planting techniques which can be used in areas after cessation of activity.

The average number of employees was 863 in 1980 as compared to the 1979 level of 762. The increase is part of the planned build-up to the 325 additional people it is expected will be employed when the expansion is completed.

### Marketing

As previously announced, the Corporation has signed a new copper concentrate sales agreement with a group of Japanese companies. This agreement replaced the original contract which was to expire at the end of 1984, and extends deliveries of the same fixed quantities to the end of 1989. The annual quantity sold under the new agreement represents about three-quarters of Lornex' current level of production of copper concentrates and will represent slightly more than half of planned production following completion of the expansion program in mid-1981. A second sales contract has been concluded for a substantial portion of the additional copper concentrates that will be produced from the expanded facilities. The latter contract calls for delivery of a fixed quantity of concentrates per year to be delivered over the period 1981 to 1985. Production in excess of the deliveries under these contracts will be sold from time to time on a spot basis.

A portion of the molybdenum in concentrates that will be produced in 1981 has been contracted for by a Canadian company on a pricing formula related to published dealer prices for molybdcic



oxide. A further portion of the 1981 molybdenum production will be converted to molybdic oxide under a toll conversion agreement and the oxide product sold through a sales agent. Arrangements will be made from time to time for the sale of the remainder of 1981 molybdenum production.

### Ore Reserves

During the year a detailed review of ore reserves was carried out. The proven reserves at December 31, 1980 are estimated to be 454.2 million tons with an average grade of 0.382% copper and 0.015% molybdenum compared with an estimated 448.5 tons with an average grade of 0.407% copper and 0.014% molybdenum at the end of the previous year.

### Exploration

The Corporation is establishing a group to carry out exploration for a full range of minerals. Initially programs will be directed to the search for minerals in British Columbia.

### Labour Agreements

A new collective agreement between the

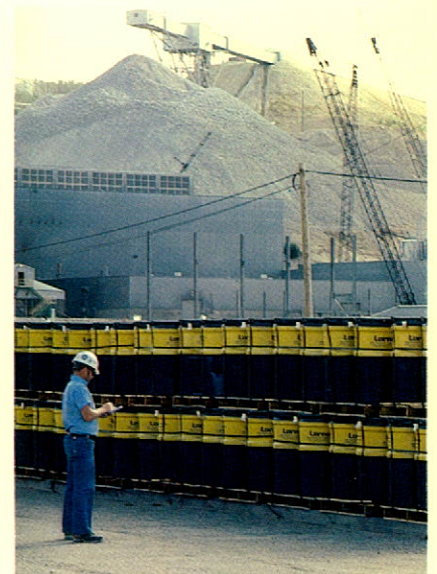
Corporation and its unionized production, maintenance, office and technical employees, replacing an agreement which expired on June 30, 1980, was reached at mid-year. The new agreement expires on June 30, 1982.

### Directors

Mr. Robert D. Armstrong, a director since 1966 and President from that time until 1976 when he became Chairman and Chief Executive Officer, will not present himself for re-election as a director or an officer of the Corporation. Under the retirement policy of Rio Algom Limited, which owns 68.1% of Lornex, Mr. Armstrong will retire as a director and officer of that corporation when its Annual Meeting is held on April 29, 1981. Mr. Armstrong has been the Chief Executive of Lornex from the beginning of the long and strenuous period when all of the elements of marketing, financing and mine evaluation were brought together to make Lornex one of the premier mines in Canada and when the decision was taken in 1979 to expand Lornex. His fellow directors wish to record their appreciation for the valuable contributions which Mr. Armstrong has made to the Corporation.



*Sharp contrast. Pickup truck driver would be wise not to stop too abruptly. The towering haul truck fully-loaded weighs a half-million pounds compared to the pickup's 3,500 pounds.*



*Molybdenum concentrate is prepared for shipment. In the background is the Lornex mill undergoing expansion and looming behind it is a coarse ore stock pile awaiting processing in the mill.*

It is intended that following the Annual General Meeting, Mr. George Albino, a director since 1966 and President and Chief Operating Officer since 1976, will also be elected Chairman and Chief Executive Officer.

Mr. J. Ian Crookston, a director since 1980, and Mr. John G. Edison, a director since 1979, have both reached retirement age under the Corporation's policy and will not present themselves for re-election as directors. Their fellow directors wish to thank Messrs. Crookston and Edison for their counsel and contributions to Lornex.

It is intended that at the Annual General Meeting to be held on April 21, 1981 Mr. T. A. Buell, Chairman, President and Chief Executive Officer of Weldwood of Canada Limited and Mr. J. H. Spicer, a consultant will be elected to fill the vacancies on the Board.

#### **Appreciation**

The Directors wish to express their appreciation to all of the Lornex people whose efforts made 1980 the most successful in the Corporation's history.

On behalf of the Board of Directors of Lornex Mining Corporation Ltd.

R. D. Armstrong  
Chairman and Chief Executive Officer

G. R. Albino  
President and Chief Operating Officer

Vancouver, B.C.  
February 24, 1981



# Auditors' Report to the Shareholders

We have examined the statement of financial position of Lornex Mining Corporation Ltd. as at December 31, 1980, and the statements of earnings, retained earnings and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the financial position of the corporation as at December 31, 1980 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Coopers & Lybrand  
Chartered Accountants

Vancouver, British Columbia  
February 4, 1981

# Accounting Policies

The principal accounting policies followed by Lornex Mining Corporation Ltd. are summarized hereunder:

## **Revenue from Mine Production and Valuation of Concentrates Awaiting Shipment**

Production of concentrates is valued and taken into income as revenue from mine production at estimated realizable metal prices less provision for possible fluctuation in price. Adjustments are made to revenue from mine production with respect to concentrate shipments when the actual metal price is known and the final weight and assay adjustments are determined. Estimated smelting, refining and marketing charges are accrued at time of production and these charges are also adjusted with respect to shipments when the final weight and assay adjustments and marketing charges are determined.

At December 31, 1980 inventories of 18.7 million payable pounds of copper and 0.3 million payable pounds of molybdenum contained in concentrates awaiting shipment were valued as described above; in addition, a shipment containing 11.9 million payable pounds of copper for which the final price had not been established was also priced in this manner and the value included in settlements receivable.

## **Conversion of United States Currency**

The accounts in United States currency are stated in Canadian dollars on the following basis:

Current assets and current liabilities at year-end exchange rates; all other assets at rates in effect at time of transactions, and revenues and expenses at actual rates prevailing during the year.

## **Mine Supplies**

Mine supplies are valued at average cost.

## **Depreciation and Amortization**

Depreciation is provided on mining equipment on a straight-line basis over the shorter of its physical life or the estimated life of the mine. The cost of plant and equipment, mining properties and preproduction expenditures is amortized on a unit-of-production basis over the estimated life of the mine.

## **Income and Mineral Resource Taxes**

The Corporation provides for deferred income and mineral resource taxes on all significant timing differences which represent the tax effects of revenue and expense items reported for tax purposes in periods different than for accounting purposes. Investment tax credits claimed for federal income tax purposes are treated as a reduction of the current year's income tax expense. This reduction amounted to \$4.5 million in 1980 (\$0.6 million in 1979).



# Statement of Financial Position

(Thousands of dollars)

Lornex Mining Corporation Ltd.  
(Incorporated under  
the laws of British Columbia)

December 31	1980	1979
<b>Current Assets:</b>		
Cash and short term deposits .....	\$ 42,955	\$ 77,344
Accounts and settlements receivable and prepaid expenses .....	12,088	9,156
Concentrates awaiting shipment .....	17,032	26,406
Mine supplies .....	11,541	10,394
Total .....	<u>83,616</u>	<u>123,300</u>
Less:		
<b>Current Liabilities:</b>		
Accounts payable and accrued liabilities .....	33,254	14,649
Income and mineral resource taxes .....	10,715	52,094
Total .....	<u>43,969</u>	<u>66,743</u>
<b>Working Capital</b> .....	<u>39,647</u>	<u>56,557</u>
Plant and equipment (note 2) .....	101,692	102,374
Construction in progress, at cost .....	92,366	4,338
Mining properties and preproduction expenditures (note 3) .....	33,320	34,719
	<u>227,378</u>	<u>141,431</u>
<b>Total assets less current liabilities</b> .....	<u>267,025</u>	<u>197,988</u>
Deduct:		
Housing loans (interest 8 <sup>3</sup> / <sub>4</sub> % to 11 <sup>3</sup> / <sub>4</sub> %) .....	1,050	1,071
Deferred income and mineral resource taxes .....	90,945	53,925
	<u>91,995</u>	<u>54,996</u>
<b>Excess of assets over liabilities</b> .....	<u>\$175,030</u>	<u>\$142,992</u>
<b>Ownership evidenced by:</b>		
Capital Stock (note 4)		
Authorized —		
9,500,000 common shares, par value of \$1.00 each		
4,500,000 Class A shares, par value of \$1.00 each		
Issued —		
8,268,762 common shares .....	\$ 8,269	\$ 8,269
Premium less discount on shares issued for cash (includes \$17 premium on shares issued under stock option plan in 1979) .....	3,317	3,317
Retained earnings .....	163,444	131,406
Total .....	<u>\$175,030</u>	<u>\$142,992</u>

Approved on behalf of the Board:  
R. D. Armstrong, Director  
J. G. Edison, Director



# Statement of Earnings

(Thousands of dollars)

Lornex Mining Corporation Ltd.

<b>Year Ended December 31</b>	<b>1980</b>	<b>1979</b>
<b>Revenue:</b>		
Net revenue from mine production .....	\$173,738	\$190,572
Investment and other income .....	12,355	3,607
	<u>186,093</u>	<u>194,179</u>
<b>Expenses:</b>		
Operating costs .....	55,388	47,058
Administrative and general .....	11,847	9,941
Amortization and depreciation .....	9,865	9,544
	<u>77,100</u>	<u>66,543</u>
Operating profit .....	108,993	127,636
Interest expense .....	110	1,739
Earnings before taxes .....	<u>108,883</u>	<u>125,897</u>
Income and mineral resource taxes		
—Current .....	6,750	58,093
—Deferred .....	37,020	10,235
	<u>43,770</u>	<u>68,328</u>
<b>Net earnings for the year</b> .....	<b>\$ 65,113</b>	<b>\$ 57,569</b>
<b>Net earnings per share</b> .....	<b>\$ 7.87</b>	<b>\$ 6.96</b>

# Statement of Retained Earnings

(Thousands of dollars)

<b>Year Ended December 31</b>	<b>1980</b>	<b>1979</b>
Balance, beginning of year .....	\$131,406	\$ 90,375
Add net earnings for the year .....	65,113	57,569
	<u>196,519</u>	<u>147,944</u>
Deduct dividends on common shares .....	33,075	16,538
Balance, end of year .....	<u>\$163,444</u>	<u>\$131,406</u>



# Statement of Changes in Financial Position

(Thousands of dollars)

Lornex Mining Corporation Ltd.

Year Ended December 31	1980	1979
<b>Source of Funds:</b>		
Operations		
Net earnings for the year .....	\$ 65,113	\$ 57,569
Add charges against earnings not involving current outlay of funds:		
Amortization and depreciation .....	9,865	9,544
Deferred income and mineral resource taxes .....	37,020	10,235
Total funds from operations .....	111,998	77,348
Prepaid royalties recovered .....	—	1,549
	<u>111,998</u>	<u>78,897</u>
<b>Disposition of Funds:</b>		
Expenditures on plant and equipment and construction in progress (net) .....	95,833	8,657
Dividends paid .....	33,075	16,538
Repayment of bank loans .....	—	24,351
	<u>128,908</u>	<u>49,546</u>
<b>Increase (Decrease) in Working Capital .....</b>	<b>(16,910)</b>	<b>29,351</b>
<b>Working Capital, beginning of year .....</b>	<b>56,557</b>	<b>27,206</b>
<b>Working Capital, end of year .....</b>	<b>\$ 39,647</b>	<b>\$ 56,557</b>



## December 31, 1980

**1. Accounting Policies**

The information on page 7 presents a summary of the principal accounting policies and is an integral part of these financial statements.

**2. Plant and equipment**

	1980	1979
	(In thousands)	
Plant and equipment at cost . . . . .	\$152,711	\$149,373
Less accumulated depreciation . . . . .	51,019	46,999
	<b>\$101,692</b>	<b>\$102,374</b>

**3. Mining Properties and Preproduction Expenditures**

	1980	1979
	(In thousands)	
Mining properties at cost . . . . .	\$ 1,233	\$ 1,233
Less accumulated amortization . . . . .	326	289
	<b>907</b>	<b>944</b>
Preproduction expenditures at cost . . . . .	45,799	45,899
Less accumulated amortization . . . . .	13,386	12,124
	<b>32,413</b>	<b>33,775</b>
	<b>\$ 33,320</b>	<b>\$ 34,719</b>

**4. Capital Stock**

At December 31, 1980, 30,000 common shares were reserved for issue under a Stock Option Plan.

**5. Commitments and Contingent Liabilities**

(a) Estimated total cost to complete approved capital expenditures at December 31, 1980 was approximately \$71,688,000 of which \$25,242,000 was committed.

(b) The Corporation has a contingent liability to buy back houses and mobile home lots at the Logan Lake townsite for \$3,418,000 until December 31, 1982; the cost of the buyback declines by 5% per annum thereafter.

(c) The Corporation has guaranteed mortgages, amounting to \$3,546,000 at December 31, 1980, on new housing in Logan Lake.

**6. Remuneration of Directors and Senior Officers**

The aggregate direct remuneration paid or payable by the Corporation to the Directors and Senior Officers of the Corporation was \$435,701 in respect of the year ended December 31, 1980.

**7. Related Party Transactions**

(a) Rio Algom Limited has agreed to supervise and manage the business of the Corporation until December 1, 1984. The 1980 management fee was \$1,000,000 and the fee for future years is to be escalated in accordance with a formula based on published government indices and subject to a maximum based on a percentage of the earnings before taxes.

(b) During 1980 the Corporation sold 125,000 payable pounds of molybdenum to Rio Algom Limited at the Canadian producer price.

**8. Revenue**

Virtually the entire net revenue from mine production relates to export sales.



**Five Year Review**

	1980	1979	1978	1977	1976
<b>Earnings:</b> (Thousands of dollars)					
Net revenue from mine production . . . . .	\$173,738	\$190,572	\$ 88,096	\$ 75,449	\$ 82,940
Investment and other income . . . . .	12,355	3,607	829	1,495	1,503
	<b>186,093</b>	194,179	88,925	76,944	84,443
Operating costs . . . . .	55,388	47,058	40,425	39,788	33,572
Administrative and general expense . . . . .	11,847	9,941	8,603	7,564	6,913
Amortization and depreciation . . . . .	9,865	9,544	9,264	9,072	8,002
	<b>77,100</b>	66,543	58,292	56,424	48,487
Operating profit . . . . .	<b>108,993</b>	127,636	30,633	20,520	35,956
Interest expense . . . . .	110	1,739	4,769	5,139	5,990
	<b>108,883</b>	125,897	25,864	15,381	29,966
Income and mineral resource taxes . . . . .	43,770	68,328	11,510	7,600	14,063
Net earnings . . . . .	<b>\$ 65,113</b>	\$ 57,569	\$ 14,354	\$ 7,781	\$ 15,903
<b>Production Data:</b>					
Tons of ore milled (000's) . . . . .	17,678	17,776	17,557	17,065	17,016
— Per operating day . . . . .	48,302	48,701	48,100	46,753	46,877
Copper in concentrate (pounds) (000's) . .	126,346	134,194	135,422	141,111	145,712
Molybdenum in concentrate (pounds) (000's) . . . . .	4,813	4,436	3,985	3,795	3,769
Silver (ounces) (000's) . . . . .	507	487	507	556	501
<b>Financial Data:</b>					
Per share of common stock					
—Net earnings . . . . .	\$ 7.87	\$ 6.96	\$ 1.74	\$ 0.94	\$ 1.93
—Dividends . . . . .	\$ 4.00	\$ 2.00	\$ 0.20	—	—
—Equity . . . . .	\$ 21.17	\$ 17.29	\$ 12.33	\$ 10.80	\$ 9.86
Long term debt and housing loans (000's)	\$ 1,050	\$ 1,071	\$ 25,448	\$ 48,851	\$ 62,263
Shareholders' equity (000's) . . . . .	\$175,030	\$142,992	\$101,942	\$ 89,194	\$ 81,343
Common shares outstanding (000's) . . . . .	8,269	8,269	8,267	8,261	8,253
Capital expenditures (000's) . . . . .	\$ 95,833	\$ 8,657	\$ 4,406	\$ 18,584	\$ 17,115







