Rio Algom
Rio Tinto

# RIO ALGOM MINES LIMITED

## Annual Report 1974

# Rio Algom Mines Limited

120 Adelaide Street West
Toronto, Canada
M5H 1W5

## DIRECTORS

D. S. Affleck *(2)*
*Partner, Fasken & Calvin, Barristers & Solicitors, Toronto*

G. R. Albino
*Executive Vice-President and Chief Operating Officer of the Company, Toronto*

W. A. Arbuckle
*Chairman, Canadian Board of The Standard Life Assurance Company, Montreal*

*†R. D. Armstrong
*President and Chief Executive Officer of the Company, Toronto*

†J. Ian Crookston
*Chairman, Nesbitt, Thomson and Company, Limited, Investment Dealers, Toronto*

*Sir Val Duncan, OBE
*Chairman of the Company and Chairman and Chief Executive, The Rio Tinto-Zinc Corporation Limited (1), London, England*

J. G. Edison, QC
*Counsel to Aird, Zimmerman and Berlis, Barristers & Solicitors, Toronto*

*Sam Harris
*Senior Partner, Fried, Frank, Harris, Shriver and Jacobson, Attorneys-at-Law, New York, U.S.A.*

L. A. Lapointe, QC
*Chairman and President, Miron Company Ltd., Manufacturers of Building Materials, Montreal*

*†B. R. MacKenzie, QC
*Counsel to Fasken & Calvin, Barristers & Solicitors, Toronto*

Leo Model *(2)*
*Director, Shields, Model, Roland Inc.. Investment Bankers, New York, U.S.A.*

F. A. Petito
*Partner, Morgan, Stanley & Co., Investment Bankers, New York, U.S.A.*

*†J. Herbert Smith
*Consulting Engineer, Toronto*

Sir Mark Turner
*Deputy Chairman, The Rio Tinto-Zinc Corporation Limited (1), London, England*

R. W. Wright, CBE
*Deputy Chairman and Deputy Chief Executive, The Rio Tinto-Zinc Corporation Limited (1), London, England*

*Members of the Executive Committee
†Members of the Audit Committee
*(1)* The parent of an international group of mining and industrial companies.
*(2)* Not standing for re-election.

## OFFICERS

### EXECUTIVE

Sir Val Duncan, OBE
*Chairman of the Company and Chairman and Chief Executive of The Rio Tinto-Zinc Corporation Limited (1), London, England*

R. D. Armstrong
*President and Chief Executive Officer*

G. R. Albino
*Executive Vice-President and Chief Operating Officer*

### CORPORATE

A. F. Lowell
*Vice-President, Minerals Marketing*

H. A. Pakrul
*Vice-President, Controller*

J. A. Sadler
*Vice-President, Exploration*

A. C. Turner
*Vice-President, Secretary*

J. Van Netten
*Vice-President, Treasurer*

J. G. Littlejohn
*General Counsel*

### MINING

E. W. Cheeseman
*Vice-President, Underground Mining Operations*

P. W. Carloss
*Vice-President, Elliot Lake Operations*

R. D. Lord
*Vice-President, Mining Research and Development*

E. J. Moyle
*Vice-President, Mining Engineering*

### ATLAS STEELS

A. V. Orr
*Vice-President, General Manager*

W. A. Thomas
*Senior Vice-President*

H. L. Brien
*Vice-President, Engineering*

C. E. Ohlson
*Vice-President, Marketing*

F. S. Robinson
*Vice-President, Purchasing and Traffic*

D. V. Roland
*Vice-President, Manufacturing*

G. L. Sandler
*Vice-President, Finance*

W. V. Vincent
*Vice-President, Sales*

### ATLAS ALLOYS

W. D. Dobbin
*Vice-President, General Manager*

K. Collyer
*Vice-President, Canadian Operations*

J. B. Dunn
*Vice-President, Controller*

### LORNEX MINING CORPORATION LTD.

C. W. Reno
*Vice-President, General Manager*

## Annual and General Meeting

The Company will hold an Annual and General Meeting on Friday, April 25, 1975 at 10:00 a.m. (Toronto Time), in the Essex Room, Four Seasons Sheraton Hotel, 123 Queen Street West, Toronto, Ontario, Canada.

## CONTENTS

## Directors' Report

**To the Shareholders:**

In 1974 the Company's revenue from mine production and sales of steel and other products increased in each quarter compared to the previous year but the rate of increase diminished sharply in the second half of the year. Net earnings increased substantially in the first half of 1974 compared to 1973 but were slightly lower in the third quarter of the year, declined sharply in the fourth quarter and for the full year were about $8.2 million below the record earnings achieved in 1973.

The 1974 provision for income and mining taxes and government royalty was $50.6 million, an increase of $38.3 million over the prior year, partly due to increased earnings before taxes. Income and mining taxes and government royalty are proportionately much higher in 1974 than in 1973 primarily because of a provision by Rio Algom for income tax (first required in the third quarter of 1973), the expiry of the Lornex Mining Corporation Ltd. tax exempt period on December 31, 1973, a provision by Lornex for British Columbia government royalty effective January 1, 1974, the introduction of increased Ontario mining taxes effective April 9, 1974, and the effect of the Federal Budget proposals of November 18, 1974, some of which are retroactive to May 6, 1974.

The very substantial improvement in earnings before providing for taxes and government royalty and for minority interests in the earnings of subsidiary companies was mainly due to sharply improved earnings from steel operations. Earnings from underground uranium and copper mines were slightly higher in total and the earnings of Lornex, before providing for taxes and government royalty, were slightly higher. The major increase in the provision for taxes and government royalty by Lornex caused a sharp decrease in the net earnings of that company, which was 56.94% owned by Rio Algom at year end.

The dramatic strengthening in the long-term uranium market and the modification of regulations governing the use of foreign produced uranium in the United States referred to in the 1973 Annual Report made it possible for Rio Algom to obtain three major and several minor uranium contracts totalling 60,735,000 pounds of uranium oxide in 1974 for delivery in the year 1977 through 1992. The prices of virtually all of the deliveries under these contracts will be determined on an annual basis at the higher of a minimum price and a settlement price that takes into account free world market conditions for uranium at the time of delivery. At year end the Company held firm contracts for the delivery of 93,330,000 pounds of uranium oxide from its Elliot Lake mines in Northern Ontario. These contracts are well balanced in relation to the major long-term expansion program that the Company plans to initiate this year and, assuming the sale of additional quantities now in prospect, will assure operation of the Company's Elliot Lake mines to approximately the end of this century. At the long-term uranium price levels now predicted it is believed that substantial reserves or resources remain uncommitted for recovery thereafter. All uranium export contracts require governmental approval and such approval has not yet been obtained in respect of the three major contracts referred to above. Subject to minor modifications it is believed that these contracts comply with government criteria and it is expected that approval will be granted in the near future. In addition to its Elliot Lake contracts the Company holds firm contracts for the delivery of 5,600,000 pounds of uranium oxide from its Lisbon mine in Utah as at December 31, 1974.

In 1974 the Lornex copper-molybdenum mine in British Columbia operated at an average daily rate of 45,056 tons of ore per day compared to 38,320 tons per day in 1973, which was its first full year of production. This higher throughput coupled with a higher average millhead grade resulted in an increase of 25% in production of payable pounds of copper in concentrate. Copper prices increased sharply in the first half of 1974 but declined rapidly later in the year and were at a very low level at year end; the average for the year was significantly below that of 1973. Earnings before taxes were slightly higher than in 1973 but income and mining taxes and the government royalty increased by $11.3 million over the previous year. Repayment of the Lornex bank debt was completed in 1974 and payments were made in respect of other Lornex debt. Depressed world economic conditions reduced the demand for copper and as a result Lornex' production exceeded sales by a substantial margin. Production is being reduced in

1975 and this curtailment, together with the strong possibility of no significant increase in copper prices, escalating costs and increased tax and government royalty imposts, will have a major negative impact on Lornex' earnings in 1975.

Reference was made in the 1973 Annual Report to a comprehensive program that had been undertaken in order to delineate the total ore reserves contained in the Lornex property and to determine the optimum mining rate for extraction. The ore delineation program was completed in 1974 as planned and the optimum mining rate program is nearing completion. The ore reserve definition was carried out in conjunction with a firm of independent consulting geologists who have concurred in the conclusions reached. The result has been the delineation of 432 million tons of ore as at December 31, 1974 with an average grade of 0.411% copper and 0.014% molybdenum. This compares to the originally delineated reserves of 293 million tons which had been reduced by the ore mined from commencement of operations to 257 million tons of ore with an average grade of 0.425% copper and 0.014% molybdenum as at December 31, 1974. This does not preclude the possibility that further ore reserves may be delineated as the mine carries on exploratory work in the normal course of mine operations. As a result of the aforementioned increase in ore reserves, the rates for amortizing plant and equipment, mining properties and preproduction expenditures were reduced effective January 1, 1974. Under normal economic conditions and reasonable tax and regulatory conditions this major increase in the Lornex ore reserves would support an expansion of the Lornex operation without unduly shortening its life.

Rio Algom's exploration activities continued at an increased level in 1974 and expenditures thereon totalled $5,143,000 compared with $3,125,000 in the previous year. These activities are more fully described in the Review of Operations section of this Report.

The Atlas stainless and specialty steel operation achieved record sales and earnings in 1974. Operating costs escalated sharply throughout the year but the strong worldwide demand for stainless and specialty steel permitted increases in volume and the institution of price increases in virtually all markets. These market factors together with the cumulative effects of product rationalization and cost control programs made it possible to improve most unit profit margins. Market conditions especially for automotive-oriented products have deteriorated and this represents an important portion of Atlas' production. Unless market conditions improve beyond current expectations it is unlikely that Atlas' sales and profit margins can be maintained at the present levels in 1975.

In summary Rio Algom's operating performance in 1974 can be regarded as eminently satisfactory even though net earnings after taxes and government royalty were less than in the previous year. However, the earnings figures in the Annual Report are expressed in current inflated dollars and to a significant extent they must be regarded as overstated. Depreciation and amortization charges, which aggregated $20,958,000 in 1974 are expressed in the conventional accounting terms of recovery of original cost over estimated useful or economic life. These changes do not reflect the true current economic values of the capital assets consumed and as a consequence the accumulated provisions for depreciation and amortization will be a fraction of the cost of replacing these assets when this is required to maintain the Company's viability.

In addition to this consideration, which in the case of Rio Algom is applicable to its investment in Atlas Steels and in physical facilities and preproduction costs of its mines, no values are reflected in the Company's accounts in respect of its orebodies. Yet as they become exhausted these must be replaced by discovery of new orebodies. Taxation is based, however, on accounting conventions that tend to overstate reported net income in a period of rising prices and as a consequence the financial resources that companies such as Rio Algom require to maintain their viability are being pre-empted by governments.

In the near term Rio Algom's net earnings will be influenced by the depressed state of the world copper markets, the indicated softening in the demand for stainless and specialty steel products, the effect of rapidly escalating operating costs and the uncertainties of governmental tax and regulatory provisions. The Company's debt ratio is relatively low, its operating competence is a matter of record and its cash flow is adequate for normal operating needs. On February 28, 1975 it was announced that the Company intends to undertake major new financing this year the proceeds of which will be used for general corporate purposes including expansion of the Company's Elliot Lake mining operation required to fulfill the major uranium contracts which the Company now holds.

In the longer term Rio Algom's uranium operations are expected to provide relatively non-cyclical and expanding earnings. The world markets for stainless and specialty steel and for copper will in all probability continue to be cyclical in nature which will result in fluctuations in earnings from year to year. But these three main operations are all long life and cost competitive on a world scale. As such they comprise a mature and reasonably diversified structure which can itself be expanded while providing a base for undertaking new projects in related fields as conditions may warrant.

At the Annual and General Meeting you will be asked to approve an amendment to the Articles of Incorporation of the Company changing its name from Rio Algom Mines Limited to Rio Algom Limited. The new name is intended to reflect the expanded scope of the Company's activities.

Mr. Leo Model has reached retirement age under the Company's policy and accordingly will not present himself for re-election as a Director. Mr. Model was from 1955 a director of a company affiliated with the predecessors of Rio Algom and in 1961 became a Director of Rio Algom. Throughout this lengthy period he has made a major and valuable contribution to this organization's growth and progress. His fellow Directors wish to record their appreciation for the distinguished manner in which Mr. Model has served the interests of the Company over this twenty year period.

Mr. D. S. Affleck, who has been a Director since October 1973, will also not present himself for re-election as a Director. It is intended that the two vacancies on the Board of Directors will not be filled and you will be asked at the Annual and General Meeting to authorize a decrease in the Board of Directors from fifteen members to thirteen.

The following appointments have been made in recognition of effective performance and the assumption of additional responsibilities:

H. L. Brien, formerly Manager of Engineering Atlas Steels, appointed Vice-President, Engineering of Atlas Steels.

P. W. Carloss, formerly General Manager, Elliot Lake Operations, appointed Vice-President, Elliot Lake Operations.

Kenneth Collyer, formerly Manager, Canadian Operations, Atlas Alloys, appointed Vice-President, Canadian Operations, Atlas Alloys.

J. B. Dunn, formerly Manager of Finance, Atlas Alloys, appointed Vice-President, Controller, Atlas Alloys.

J. G. Littlejohn, formerly Legal Counsel, appointed General Counsel.

E. J. Moyle, formerly Manager, Mining Engineering, appointed Vice-President, Mining Engineering.

F. S. Robinson, formerly Manager, Purchasing and Traffic Atlas Steels, appointed Vice-President, Purchasing and Traffic, Atlas Steels.

Improvements were achieved in all sectors of the Company's operations during 1974 in addition to further strengthening of Rio Algom's base for long-term growth. The Directors wish to record their appreciation of the loyal and diligent efforts of the management and employees of Rio Algom and associated companies that has made this possible.

On behalf of the Board,

R. D. ARMSTRONG,
President and Chief
Executive Officer.

Toronto, Ontario
February 28, 1975

## Review of Operations

## MINING

Earnings from the Company's mining operations before providing for income and mining taxes and earnings attributable to minority interests were $69,693,000 compared to $65,883,000 in 1973. Total net revenue from operations was $164,818,000 compared to $151,528,000 last year.

### URANIUM

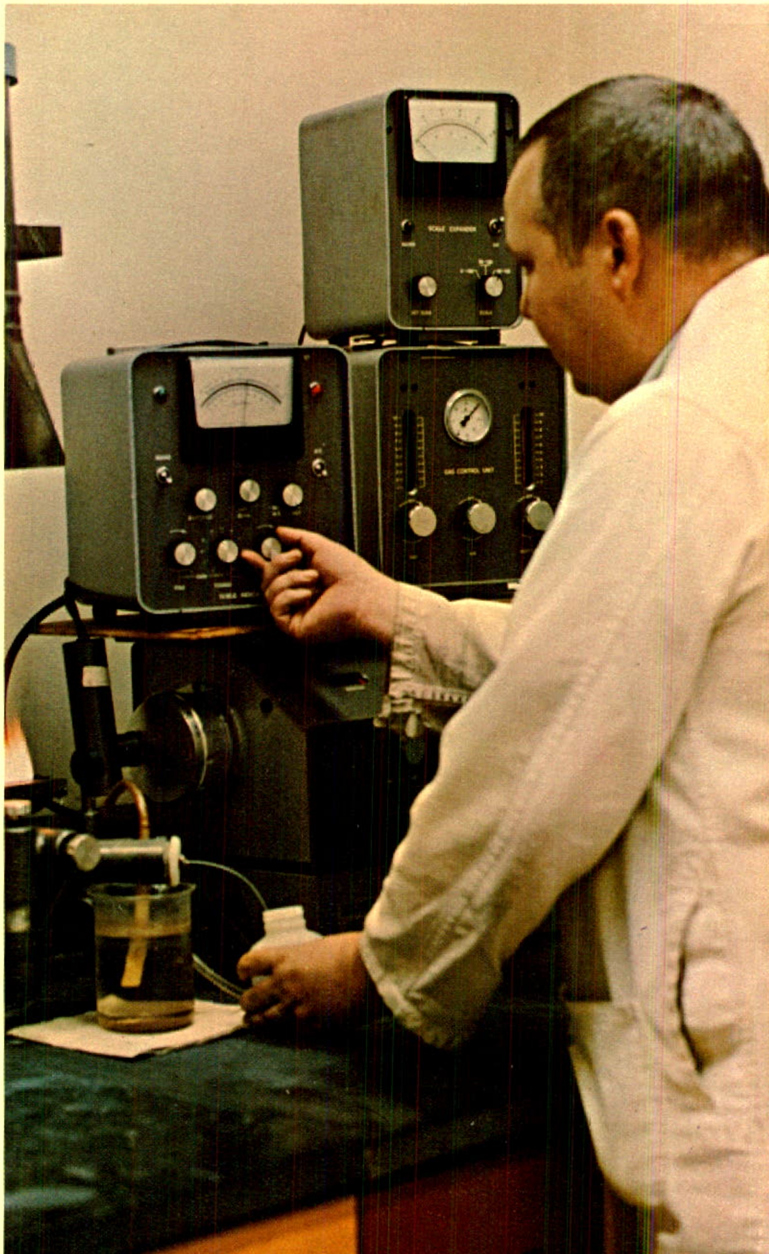
Comparative production from uranium operations in 1974 and 1973 was as follows:

| | Total | | Elliot Lake | | Lisbon | |
|---|---|---|---|---|---|---|
| | 1974 | *1973* | 1974 | *1973* | 1974 | *1973* |
| Tons of ore milled (thousands) | 1,679 | *1,621* | 1,446 | *1,419* | 233 | *202* |
| Average tons milled per day | — | — | 4,240 | *4,260* | 652 | *564* |
| Average recovered grade per ton (lbs.) | — | — | 3.4 | *3.4* | 5.4 | 6.6 |
| Average mill recovery | — | — | 95.3% | *95.5%* | 91.9% | *92.3%* |
| Pounds of uranium oxide produced (thousands) | 6,194 | *6,166* | 4,931 | *4,818* | 1,263 | *1,348* |
| Pounds of uranium oxide delivered (thousands) | 6,254 | *5,463* | 5,057 | *4,111* | 1,197 | *1,352* |

#### Elliot Lake

During the year all production at Elliot Lake was from the New Quirke mine and the Quirke mill. The tonnage of ore milled at the Elliot Lake uranium operations in both 1973 and 1974 was lower than design capacity due to a shortage of experienced miners and production was also adversely affected by work slow downs in March and April 1973 while union negotiations were in progress. There was virtually no change in the average mill head grade of ore as compared with 1973. In 1974 escalation of the basic price provided for in sales contracts of $U_3O_8$ delivered currently under contracts entered into in 1966 and 1968 with purchasers in the United Kingdom, Canada and Japan provided adequate protection against increases in production costs per ton of ore.

During the year work commenced on the driving, from the existing New Quirke shaft at the eighth level, of a decline in which a conveyor haulage system will be installed to permit the development and mining of the orebody below the eighth level. This decline and haulage system is scheduled for completion in 1976. To meet sales commitments referred to in the Directors' Report and to permit the Company to take advantage of other market opportunities the Elliot Lake mining and milling facilities will be expanded progressively over a period of years. The first stage of the expansion will be an increase in the capacity of the Quirke mine and mill to 7,000 tons of ore per day. It is intended that this work will begin in 1975 and be completed in 1978.



*Uranium content of ore sample is checked through atomic absorption at Company's Elliot Lake laboratory.*

*Opposite page: Giant ion exchange circuit is heart of process which extracts uranium from ore.*

*Insets: Quirke uranium plant at Elliot Lake. Underground, miners prepare for blasting.*

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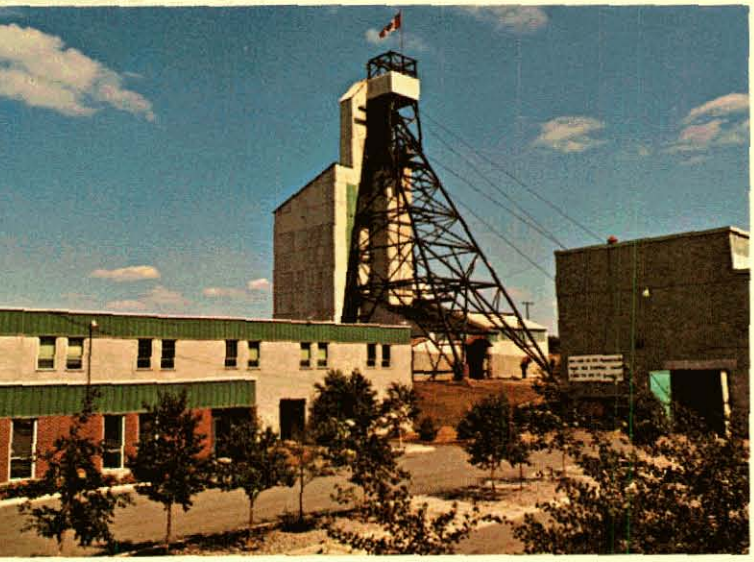

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## Lisbon Mine

Expansion of the Lisbon uranium mine plant facilities in Utah was completed in the first quarter of the year to increase the design average milling rate from 500 to 700 tons per day. The increased design rate was achieved on a fairly consistent basis by year-end despite the manpower shortages which were experienced. Mill head ore grade continued to be lower than originally anticipated.

The benefits of the increased production rate and the improvements in the efficiency of operations achieved were more than offset by the continued rapid escalation in the costs of materials and supplies, particularly for energy and mine supplies. The escalation of the basic price provided for in one sales contract relating to a large portion of the $U_3O_8$ deliverable under contracts entered into in 1968 and 1970 has afforded only partial protection against production cost increases.

Since June 1972 operations have been conducted under a provisional source materials licence issued by the United States Atomic Energy Commission. An application for a permanent source material licence is still pending before the United States Nuclear Regulatory Commission, an agency of the United States Government established in October 1974 to take over certain of the functions formerly exercised by the Atomic Energy Commission.

*Lisbon uranium mine. Design milling rate enlarged in 1974.*

1. *Elliot Lake mining operation's ventilation system has been steadily expanded. Photo shows new exhaust fan at New Quirke mine.*
2. *Landscaping at New Quirke is part of Company's overall planting program.*

3., 4. *Lakes and forests of the Elliot Lake area provide ample opportunity for outdoorsmen.*

## COPPER

Comparative production from copper operations in 1974 and 1973 was as follows:

| | Total | | Lornex | | Poirier | |
|---|---|---|---|---|---|---|
| | 1974 | 1973 | 1974 | 1973 | 1974 | 1973 |
| Tons of ore milled (thousands) | 16,882 | 14,626 | 16,445 | 13,987 | 437 | 639 |
| Average tons milled per day | — | — | 45,056 | 38,320 | 1,252 | 1,805 |
| Average mill head grade — copper | — | — | 0.457% | 0.422% | 2.1% | 2.4% |
| — molybdenum | — | — | 0.016% | 0.017% | — | — |
| Average mill recovery — copper | — | — | 88.1% | 89.5% | 94.3% | 94.1% |
| — molybdenum | — | — | 75.8% | 71.9% | — | — |
| Pounds of payable copper in concentrate produced (thousands) | 144,156 | 129,800 | 128,064 | 102,180 | 16,092 | 27,620 |
| Pounds of payable molybdenum in concentrate produced (thousands) | 4,038 | 3,481 | 4,038 | 3,481 | — | — |
| Ounces of silver produced (thousands) | 500 | 464 | 464 | 431 | 36 | 33 |
| Gold produced (ounces) | 592 | 763 | 592 | 763 | — | — |

### Lornex

The results of operations and the financial position of the Lornex copper-molybdenum mine in British Columbia which was 56.94% owned by Rio Algom at year end are included with those of Rio Algom on a fully consolidated basis. The comparative operating results and financial position of Lornex Mining Corporation Ltd. as an entity are summarized at right.

The gross revenue price for copper produced by Lornex in 1974 averaged 72 cents per payable pound; the comparable average for 1973 was 88 cents per payable pound. The 1974 price, however, reached its peak in the months of April and May and declined steadily and sharply thereafter. For the last quarter of 1974 this price averaged 58 cents per payable pound compared to an average of $1.00 per payable pound for the last quarter of 1973 and had declined to 52 cents per payable pound for the month of December. The reasons for the major increase in taxes and government royalty payable by Lornex are set forth in the Directors' Report.

The Lornex bank loans, which originally totalled $60,000,000 and which had been reduced to $33,595,000 at the end of 1973, were repaid in full during 1974. In addition the 8¾% Notes, which originally totalled $26,836,000 and which had been reduced to $26,583,000 at the end of 1973, were repaid to the extent of $3,884,000 during the year. The principal repayments on long-term debt during the year totalled $37,479,000 and interest payments were also made in the amount of $3,806,000. Interest not currently payable on Income Debentures was accrued

**Results of Operations ($000's):**

| | 1974 | 1973 |
|---|---|---|
| Net revenue from production | $ 85,421 | $ 81,829 |
| Operating expenses | 34,589 | 25,867 |
| Amortization and depreciation | 7,029 | 8,366 |
| | 41,618 | 34,233 |
| Earnings before interest and taxes | 43,803 | 47,596 |
| Interest costs (net of investment and other income) | 4,612 | 10,506 |
| Earnings before taxes | 39,191 | 37,090 |
| Income and mining taxes and government royalty | 16,510 | 5,192 |
| Net earnings for year | $ 22,681 | $ 31,898 |
| Minority shareholders' interests in above earnings | $ 9,766 | $ 14,293 |

**Summary of Financial Position ($000's):**

| | 1974 | 1973 |
|---|---|---|
| Cash and receivables | $ 14,154 | $ 10,009 |
| Inventories | 29,680 | 24,280 |
| Current assets | 43,834 | 34,289 |
| Current liabilities | 17,778 | 13,164 |
| Working capital | 26,056 | 21,125 |
| Fixed and other assets (net) | 131,660 | 135,811 |
| Long term debt | (78,363) | (112,373) |
| Deferred income and mining taxes | (14,815) | (2,715) |
| Net assets | $ 64,538 | $ 41,848 |
| Minority shareholders' interests in net assets | $ 27,790 | $ 18,752 |

and charged to Lornex' earnings in the amount of $4,945,000. Lornex' total long-term debt was $78,363,000 at December 31, 1974, in addition to which an amount of $5,822,000, payable in 1975, was included in current liabilities.

The results of the program initiated in 1973 in order to delineate the total ore reserves contained in the Lornex property are described in the Directors' Report.

1

**Mines de Poirier**

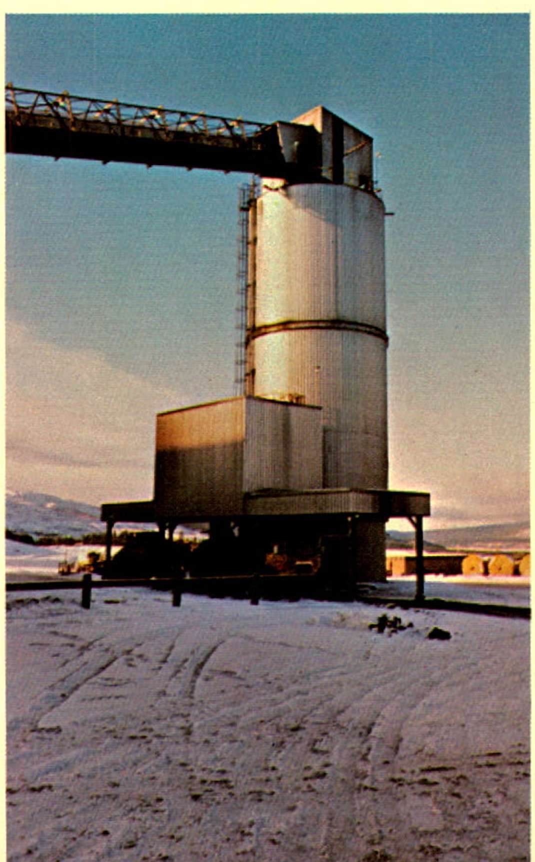
At the Mines de Poirier copper mine earnings were lower due to a combination of substantially increased labour rates and material costs, lower grade and materially lower volume resulting from the inability to attract a sufficient number of experienced miners.

The milling rate was reduced to 1,500 tons of ore per day on January 1, 1974 to permit maximum recovery of the ore reserves from this mine. On February 17, 1975 it was announced that all the economically recoverable ore reserves will have been mined out by mid 1975. At that time the mine will be permanently closed and when milling operations terminate the plant and equipment will be sold.

*Lornex mine and plant.*

2

1. *Giant ore-carrying trucks between Lornex open pit and primary crusher.*
2. *Lornex mill control room.*
3. *Autogenous mill dwarfs operator.*
4. *Copper concentrate being loaded into tanker trucks.*



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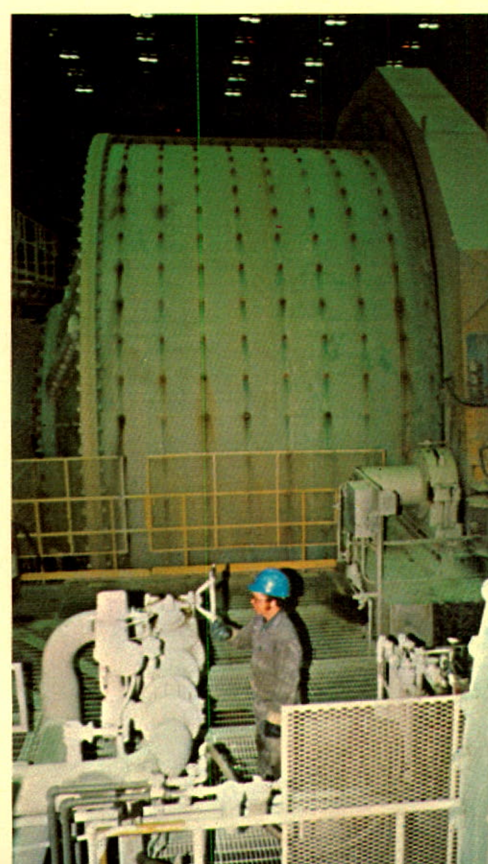

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## EXPLORATION

Exploration expenditures by Rio Algom and its subsidiaries, including expenditures on the Sage Creek coking coal and the Lac Roberge asbestos prospects, were $5,143,000 compared with $3,125,000 in the previous year. Exploration activities comprised programs directed at the identification of uranium and base metal orebodies in the United States and base metal orebodies in Canada. Exploration activities were at an increased level in the Northwest Territories and the Yukon. In addition to its directly conducted exploration programs Rio Algom has extended its sponsorship of programs carried out on its behalf by independent organizations in Canada and the United States.

No new orebodies that can presently be regarded as commercially viable were discovered in 1974. A number of properties held in Canada and the United States are regarded as prospective based on surface mineralization and/or drilling results. These will be examined in more detail by drilling and other work in 1975.

During 1974 additional investigative programs were carried out for the purpose of determining the feasibility of developing, for production, the Sage Creek prospect located in southeastern British Columbia and the Lac Roberge prospect located in northwestern Quebec. The results of these investigations continue to be encouraging and the investigative programs will be continued in 1975.

## RESEARCH AND DEVELOPMENT

During 1974 research and development activities were mainly directed toward reducing mining and milling costs. Studies were continued with regard to preconcentration of uranium ore and uranium recovery from waste water and tailings solution. Projects related to the protection and improvement of the environment, particularly with regard to tailings disposal areas, were actively pursued.

## EMPLOYEE RELATIONS

At December 31, 1974 there were 2,063 employees engaged in mining operations of whom 1,619 were engaged in production and 397 were engaged in executive, technical, administrative or clerical functions and 47 were engaged in exploration activities.

Labour contracts in respect of mining operations are in effect in the Elliot Lake area for hourly rated employees until January 15, 1976, for office and technical employees until February 29, 1976 and for operating engineers until April 15, 1976; at the Lisbon mine for hourly rated employees until December 31, 1975 and at the Lornex mine for hourly rated and office and technical employees until June 30, 1976.

Other than brief work stoppages at the Elliot Lake mill and at the Lisbon mine, there were no strikes or other work stoppages during the year. Rio Algom considers that its employee relations continue to be good. Owing to inflationary pressures and a general shortage in North America of employees skilled in mining, particularly underground miners and skilled tradesmen, it was, as in the Canadian mining industry generally, necessary in 1974 to grant increases in salaries and wages earlier and greater than those provided for in union contracts.

In order to help remedy the shortage of underground miners at the Quirke property the course to train miners established in 1973 in co-operation with Canada Manpower was expanded during the year. A similar course was established during the year at the Lisbon mine.

The Ontario Ministry of Health, after a survey of Rio Algom's underground and surface operations, published an environmental report in November 1974 in which it was stated that radiation values were acceptable, that contamination from diesel exhaust was not significant, but in most of the work areas the concentration of quartz dust was in excess of the recommended limit. Rio Algom questioned some of the methods used to reach the conclusion regarding the dust samples and the derivation of the recommended limit, but is continuing its program to further improve dust control. A report on the medical examination of all employees exposed to dust is expected to be released in the near future by the Ontario Ministry of Health.

Rio Algom has submitted a brief to a Royal Commission on the Health and Safety of Workers in Mining in Ontario which began public hearings in January 1975. The Company will continue its programs to keep abreast of and to develop new methods and technology to maintain safe and healthy working conditions at its mines and to implement these developments as they become proven and available.

*Exploration parties scoured selected areas of Canada and the U.S. in 1974.*

1. *Geologists cross a snow field in eastern Alaska.*
2. *Outcrop is examined on Baffin Island.*
3. *Helicopter is refuelled in northern Rockies.*


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## STEEL

Earnings from specialty and stainless steel operations before providing for income taxes were $34,516,000 compared with $12,850,000 in 1973, an increase of $21,666,000. Total sales, including metal products purchased from others by the Atlas Alloys metal service centres for resale, amounted to $225,753,000, an increase of $62,361,000.

### ATLAS STEELS

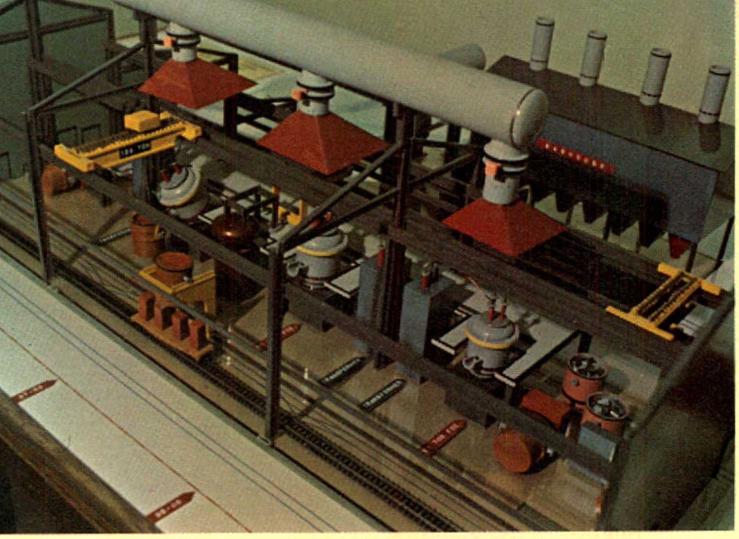
#### Marketing and Distribution

The strong world-wide demand for stainless, specialty and low alloy steel products which began in 1973 continued to strengthen during the first three quarters of 1974 and record sales levels for mill products were attained. Price increases were instituted on a wide range of products. The strong market during this period and the cumulative effects of product rationalization programs also permitted an improvement in product mix. Demand for products exceeded manufacturing capacity in some cases and equitable allocation among established customers was necessary. In the fourth quarter demand slackened and a decline in sales volume became evident reflecting the deterioration in world and Canadian economic conditions.

#### Manufacturing

During the year the Welland and Tracy plants operated virtually at capacity. The high production level at both plants permitted a high utilization of basic manufacturing facilities and manpower. The cumulative effects of ongoing and new profit improvement programs developed to improve manufacturing efficiency, quality and utilization of raw materials resulted in cost reductions which modified but did not offset cost increases. Strict cost control programs continue to be pursued aggressively.

At the Welland plant a 2,000 ton forging press which forms steel blanks used to make dies in the plastic molding and die casting industry was brought into production in February and has added forging capacity beyond the limits of an older 1,000 ton unit which is continuing in operation. The installation of a third Sendzimir cold rolling mill, which will increase the Welland plant strip capacity by some 50 percent, was completed in September and the mill has been brought into commercial production. Construction of a new steel melting facility to be equipped with a highly effective pollution control system is on schedule and, when brought into production in 1977, will provide additional capacity, reduce production costs and will be a key factor in increasing long term profitability of the Welland plant.



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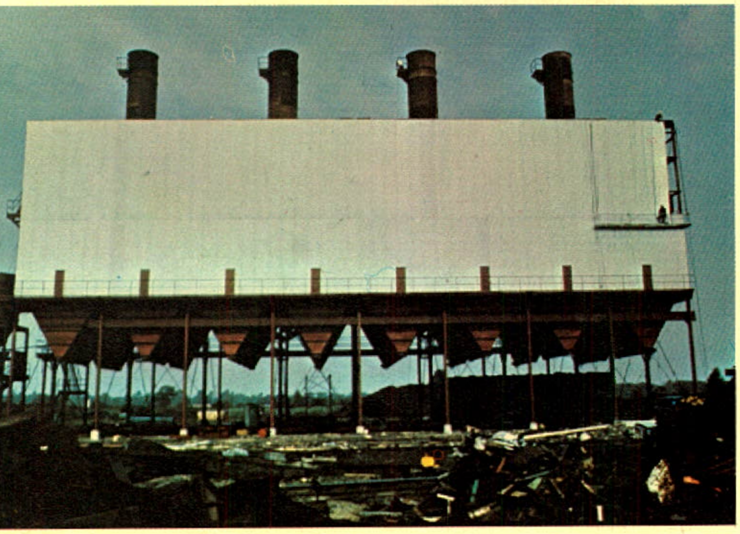

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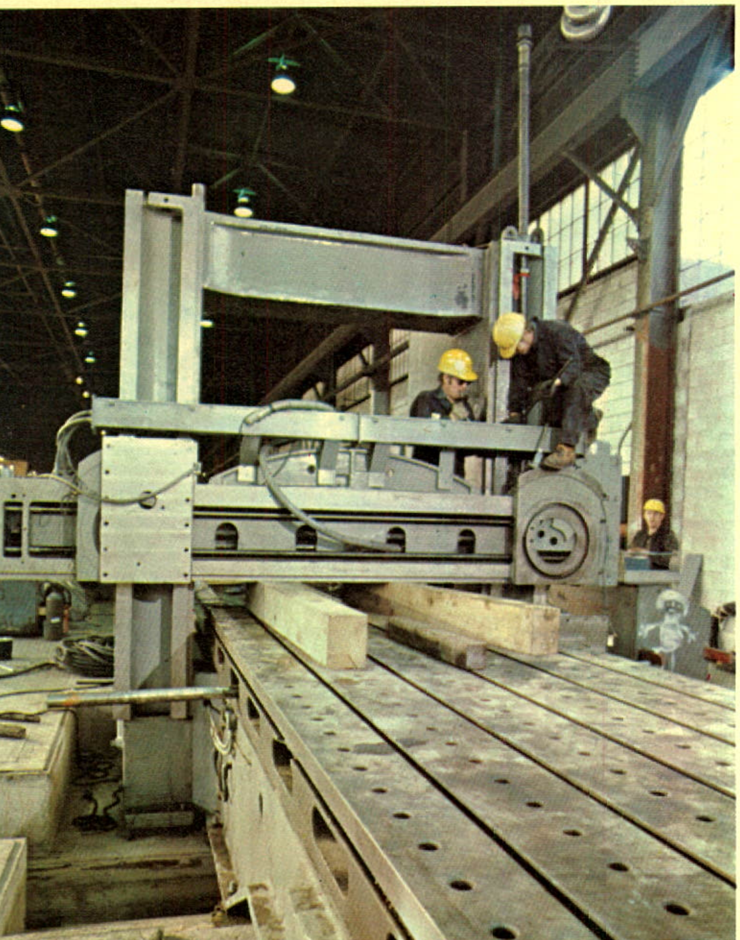

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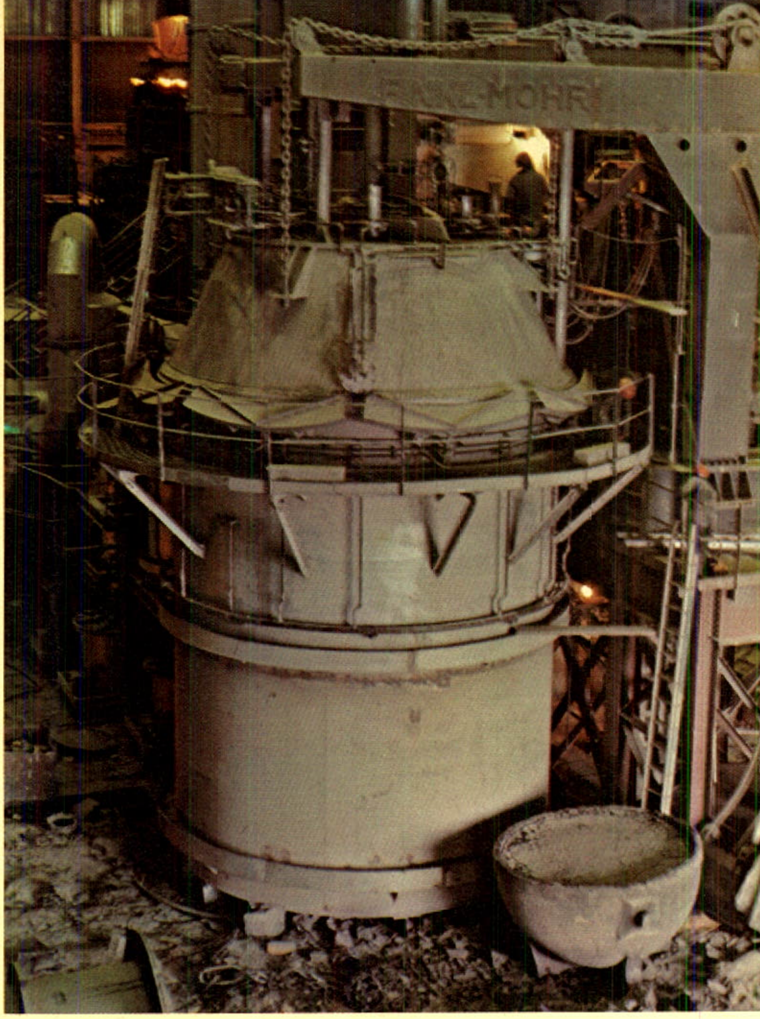

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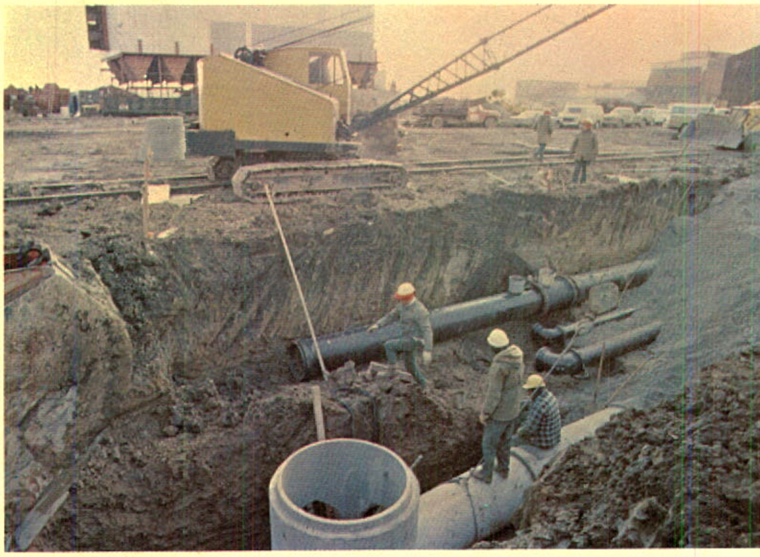


5

*Atlas Steels' expansion and modernization program was on schedule. Photos show some of the progress.*

1. *What the completed new melt shop at Welland will look like is shown in this model.*
2. *Melt shop's "bag house" nears completion. The facility will "vacuum clean" smoke from melting process.*
3. *"Planer Miller", which provides precision finish to large mould and die blocks, being installed at Welland plant.*
4. *Vacuum refining unit being installed at Tracy to increase melting capacity.*
5. *Early excavation for new Welland melt shop. The facility is scheduled to go into production in 1977.*

At the Tracy plant installation of a vacuum oxygen degassing unit has been completed and the unit is being brought into production. This facility will increase melting capacity and reduce raw material costs.

### Research and Development

During 1974, research and development was directed to process improvements, operating cost reductions, improved product yield and utilization of lower cost materials.

## ATLAS ALLOYS

In 1974 the Atlas Alloys metal service centre distribution network achieved record earnings from record sales of steel products manufactured by Atlas and metal products purchased from others for resale. The strong demand experienced for most products throughout the year resulted in increased volume which, coupled with the institution of price increases in most markets and an increase in warehousing processing activities, resulted in improved profit margins.

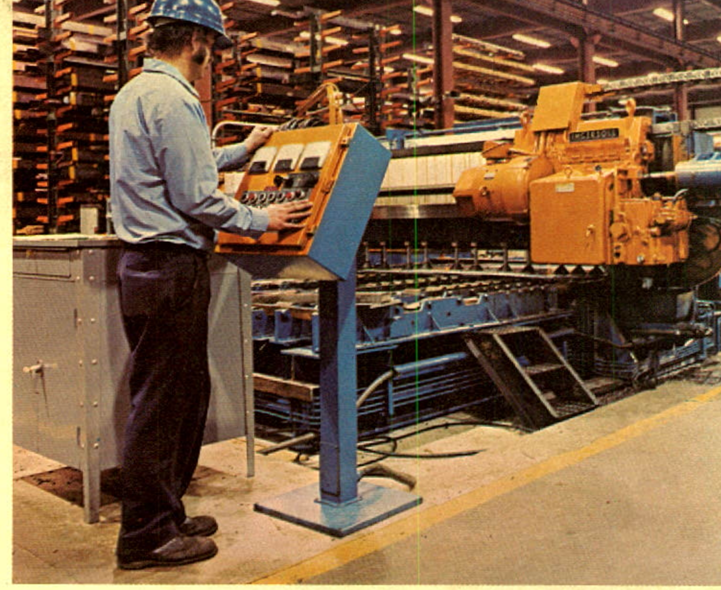
Operations at the six service centres in Canada were at a high level and at times demand exceeded the availability of some products. Warehouse processing activities were expanded and operated at high levels. In the latter part of the year demand for some products slackened but demand remained strong for products used in the capital goods sector.

In the United States demand was high and sales volume was increased despite a shortage in the availability of some products; profit margins were improved. In the latter part of the year demand for automotive-oriented products deteriorated. The Cleveland service centre operations were moved in January 1975 to a larger modern new facility in Valley View, Ohio, some fifteen miles south-east of Cleveland.

United Kingdom sales volume declined because of decreased demand throughout most of the year. Profit margins were improved by increased emphasis on processing activities. Economic uncertainty hampered operations in this market.

In Australia sales volume increased at the three metal service centres despite difficulty experienced in obtaining a supply of some products. Earnings declined primarily as a result of the devaluation of the Australian dollar. The expansion of the Melbourne facility has resulted in improved efficiencies; additional wire drawing facilities installed during the year will permit demand for these products to be met.

Sales volume and profit margins in Mexico were improved in a good market. Market conditions were good in Europe and South America until the latter part of the year but sales opportunities in these markets were limited by the availability of product.

1


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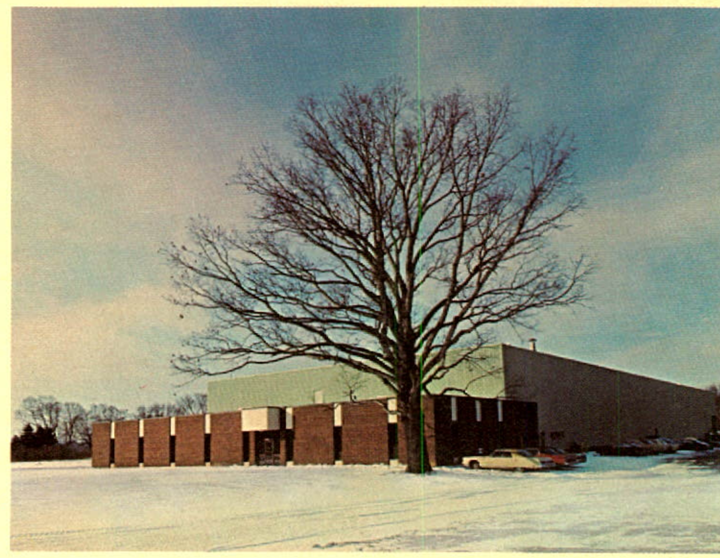

3


4


1. *Six-inch thick alloy steel can be cut to customer specs by this large plate saw at Atlas Alloys new Cleveland-area service centre (photo 2).*

3. *Customers watch slitting operation during opening of expanded Etobicoke service centre.*

4. *Ultra high temperature plasma cutting at Etobicoke centre.*

## EMPLOYEE RELATIONS

At December 31, 1974 there were 3,160 employees engaged in steel operations of whom 1,817 were engaged in production, 623 in sales and marketing and 720 in executive, administrative or clerical functions.

Other than a 32 day strike by office and technical employees at the Tracy plant which resulted in the loss of 3 days production and brief work stoppages at the Tracy plant there were no other strikes or work stoppages during the year. It is considered that relations with steel operation employees continued to be good.

Labour contracts in respect of steel operations are in effect at the Welland plant for hourly rated employees until February 16, 1976 and for office and technical employees until August 31, 1976; at the Tracy plant for hourly rated employees until November 30, 1975 and for office and technical employees until January 31, 1976; and for the Atlas Alloys metal service centre in Valley View, Ohio for hourly rated employees until July 14, 1975. Because of inflationary pressures it was, as in the Canadian steel industry generally, necessary in 1974 to grant increases in salaries and wages earlier and greater than those provided for in union contracts.

## FINANCIAL

Consolidated net earnings for 1974 were $43,824,000 as compared with net earnings of $52,060,000 for 1973. Net earnings per common share were $3.52 in 1974 and $4.19 in 1973; in both cases the earnings per share are stated after provision for dividends on preference shares and are based on the weighted average number of shares outstanding during the year.

During 1974 dividends of $714,000 on preference shares and $12,261,000 on common shares were paid. Dividends paid on common shares in 1974 totalled $1.00 per share comprising dividends of 50¢ per share paid on June 27, 1974 and on December 30, 1974. In 1973 dividends paid on common shares totalled 70¢ per share comprising dividends of 20¢ and 50¢ per common share paid on June 28, 1973 and December 27, 1973 respectively.

During the year principal repayments and interest payments on bank loans and long term debt totalled $40,979,000 and $6,785,000 respectively. Principal repayments include an amount of $37,479,000 repaid on Lornex long term debt and U.S. $3,500,000 repaid on the borrowing to finance the Lisbon uranium mine in Utah. In addition the Company purchased $1,703,000 principal amount of 5¾% debentures for cancellation. During the year net expenditures on capital projects were $14,261,000. The Company invested $1,191,000 in shares of an affiliated company and $819,000 in purchases of minority shareholders' interests in subsidiary companies.

## Auditors' Report

To the Shareholders of Rio Algom Mines Limited:

We have examined the consolidated statement of financial position of Rio Algom Mines Limited as at December 31, 1974 and the consolidated statements of earnings, retained earnings, contributed surplus and changes in financial position for the year then ended. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence as we considered necessary in the circumstances.

In our opinion these consolidated financial statements present fairly the financial position of the companies as at December 31, 1974 and the results of their operations and the changes in their 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.

In accordance with the requirements of Section 212 of the Companies' Act of British Columbia in our opinion due provision has been made for minority interests.

Toronto, Canada,
February 27, 1975.

COOPERS & LYBRAND
Chartered Accountants

## ACCOUNTING POLICIES

The principal accounting policies followed by Rio Algom Mines Limited and its subsidiaries are summarized hereunder to facilitate a comprehensive review of the financial statements contained in this report.

### BASIS OF CONSOLIDATION

The consolidated financial statements include the accounts of Lornex Mining Corporation Ltd. and all other significant subsidiary companies.

The accounts in foreign currencies are stated in Canadian dollars on the following basis:

Current assets and current liabilities at year-end exchange rates; all other assets and any related depreciation and long-term liabilities at rates in effect at time of transactions; and revenues and expenses (other than depreciation) at average rates for the year.

### VALUATION OF INVENTORIES AND CONCENTRATES AWAITING SHIPMENT

Inventories of steel, other metals, raw materials and supplies are valued at the lower of cost and market. Cost is determined generally at average or standard costs which approximate actual. Market for steel and other metals is net realizable value and for raw materials and supplies is replacement cost. Intercompany profits have been excluded from these inventories.

Concentrates awaiting shipment are valued at estimated realizable metal prices.

### DEPRECIATION AND AMORTIZATION

The following accounting policies are being followed in connection with the depreciation charges of the Company:

(i) Mining fixed assets:

Depreciation is being provided on fixed assets on the basis of the shorter of physical life or economic life, as estimated for the individual mining units, the economic life to be adjusted from time to time as conditions warrant.

(ii) Steel fixed assets:

Fixed assets are being depreciated on the straight line method based on engineering estimates of the lives of the assets at the following rates:

| | |
|---|---|
| Buildings | 4% per annum |
| Plant and equipment | 6⅔% per annum |

Mining properties and preproduction expenditures are being amortized on the same basis as depreciation is provided on mining fixed assets.

Excess of acquisition cost over adjusted book value of Atlas Steels assets is being amortized on a straight line basis over a 20 year period which will end in 1982.

### CAPITALIZATION OF INTEREST

The Company follows the policy of capitalizing net interest costs during construction or development only on those projects for which specific borrowings have been made; this would normally apply only to such major new projects from beginning of construction or development up to the commencement of commercial operations. In these cases interest earned on borrowed funds during the development and construction period is applied against the interest expense to reduce the amount of interest costs capitalized. Such net interest costs are capitalized because it is considered that they would not have been incurred if the project had not been undertaken and therefore are properly part of the capital cost of the total project.

### DEVELOPMENT PROJECTS AND EXPLORATION

Development projects are carried forward as assets while the projects are considered to be of value to the Company. All exploration expenses have been written off.

### INCOME TAXES

The Company has provided for current income taxes payable on the assumption that the amending Bill to the Income Tax Act, as presented to Parliament to implement the November 18, 1974 Federal Budget, will become law.

Deferred income taxes have been provided for since the accumulated amounts of depreciation and mine development expenses claimed for income tax purposes exceed the accumulated amounts recorded in the accounts. Deferred tax accounting practices are also being followed by Lornex.

The Company applied in 1970 for an exemption from tax on the income of its New Quirke mine for three years commencing from October 1, 1969. The application has not yet been ruled on by Revenue Canada, Taxation.

Based on the wording of the exempting section of the Income Tax Act, on the assumption that it will be amended as proposed in the November budget, and on the fact situations in which taxpayers in comparable decided cases have been successful, the Company's tax advisors are of the opinion that the prospects for gaining exemption are favourable. If no exemption is granted, the Company would be subject to additional taxes of approximately $12 million for which no provision is made in the financial statements.

## RIO ALGOM MINES LIMITED

## Consolidated Statement of Financial Position

**DECEMBER 31, 1974**

($000's omitted)

| | 1974 | 1973 |
|---|---|---|
| CURRENT ASSETS: | | |
| Cash and short term deposits | **$ 27,016** | $ 20,098 |
| Receivables and prepaid expenses | **71,220** | 57,466 |
| Due from affiliated companies | **21** | 2,750 |
| Inventories and concentrates awaiting shipment (note 2) | **152,052** | 108,798 |
| Total | **250,309** | 189,112 |
| Less: | | |
| CURRENT LIABILITIES: | | |
| Bank loans | **9,069** | 7,232 |
| Accounts payable and accrued liabilities | **45,868** | 31,325 |
| Income and mining taxes and government royalty | **33,267** | 9,103 |
| Long term debt due within one year (note 5) | **7,081** | 8,023 |
| Total | **95,285** | 55,683 |
| WORKING CAPITAL | **155,024** | 133,429 |
| Plant and equipment, less depreciation (note 3) | **160,823** | 162,052 |
| Mining properties and preproduction expenditures, less amortization (note 4) | **51,617** | 56,038 |
| Excess of acquisition cost over adjusted book value of Atlas Steels assets, less amortization | **8,371** | 9,418 |
| Investment in affiliated company, at cost | **1,191** | — |
| TOTAL ASSETS LESS CURRENT LIABILITIES | **377,026** | 360,937 |
| Deduct: | | |
| Long term debt (note 5) | | |
| Rio Algom Mines Limited | **26,000** | 27,712 |
| Subsidiary companies | **37,125** | 76,458 |
| Deferred income and mining taxes | **23,315** | 5,515 |
| Minority shareholders' interests in subsidiary companies | **27,790** | 18,843 |
| | **114,230** | 128,528 |
| EXCESS OF ASSETS OVER LIABILITIES | **$ 262,796** | $ 232,409 |
| OWNERSHIP EVIDENCED BY: | | |
| Capital stock (note 6) | **$ 84,753** | $ 85,427 |
| Contributed surplus | **20,009** | 19,797 |
| Retained earnings | **158,034** | 127,185 |
| Total | **$ 262,796** | $ 232,409 |

Approved on behalf of the Board:

J. H. SMITH, Director

R. D. ARMSTRONG, Director

## Consolidated Statement of Earnings

**YEAR ENDED DECEMBER 31, 1974**

($000's omitted)

| | 1974 | 1973 |
|---|---|---|
| REVENUE: | | |
| Revenue from mine production and sales of steel and other products | **$ 390,571** | $ 314,920 |
| Investment and other income | **5,548** | 2,438 |
| | **396,119** | 317,358 |
| EXPENSES: | | |
| Cost of mine production and steel sales | **219,855** | 172,475 |
| Selling, general and administration | **37,050** | 30,332 |
| Interest | **8,904** | 11,840 |
| Depreciation and amortization (note 9) | **20,958** | 20,853 |
| Exploration | **5,143** | 3,125 |
| | **291,910** | 238,625 |
| | **104,209** | 78,733 |
| INCOME AND MINING TAXES AND GOVERNMENT ROYALTY | | |
| Current | **32,819** | 6,838 |
| Deferred | **17,800** | 5,515 |
| | **50,619** | 12,353 |
| Earnings before adjustment for minority interests in subsidiary companies | **53,590** | 66,380 |
| Minority interests in profits of subsidiaries | **9,766** | 14,320 |
| NET EARNINGS FOR THE YEAR | **$ 43,824** | $ 52,060 |
| EARNINGS PER COMMON SHARE | **$ 3.52** | $ 4.19 |

## Consolidated Statement of Retained Earnings

**YEAR ENDED DECEMBER 31, 1974**

($000's omitted)

| | 1974 | 1973 |
|---|---|---|
| BALANCE, beginning of year | **$ 127,185** | $ 84,455 |
| Add: | | |
| Net earnings for the year | **43,824** | 52,060 |
| | **171,009** | 136,515 |
| Deduct: | | |
| Dividends on preference shares | **714** | 753 |
| Dividends on common shares | **12,261** | 8,577 |
| | **12,975** | 9,330 |
| BALANCE, end of year | **$ 158,034** | $ 127,185 |

## Consolidated Statement of Contributed Surplus

**YEAR ENDED DECEMBER 31, 1974**

($000's omitted)

| | 1974 | 1973 |
|---|---|---|
| BALANCE, beginning of year | **$ 19,797** | $ 19,655 |
| Profit on purchase of preference shares for cancellation | **212** | 142 |
| BALANCE, end of year | **$ 20,009** | $ 19,797 |

## Consolidated Statement of Changes in Financial Position

**YEAR ENDED DECEMBER 31, 1974**

($000's omitted)

| SOURCE OF FUNDS: | 1974 | 1973 |
|---|---|---|
| Earnings before adjustment for minority interests in subsidiary companies | **$ 53,590** | $ 66,380 |
| Add (deduct) items included in earnings not involving current outlay (receipt) of funds: | | |
| Depreciation, amortization and other charges (net) | **21,830** | 21,714 |
| Deferred income and mining taxes | **17,800** | 5,515 |
| Profit on sale of properties | **—** | (505) |
| | **93,220** | 93,104 |
| Proceeds on sale of properties | **—** | 2,186 |
| Reduction in settlements receivable — 1974 | **—** | 6,903 |
| Bank loans of subsidiaries | **—** | 10,500 |
| Issue of common shares | **61** | 242 |
| | **93,281** | 112,935 |
| DISPOSITION OF FUNDS: | | |
| Expenditures (net) for plant and equipment, mining properties and preproduction | **14,261** | 9,251 |
| Dividends on preference shares | **714** | 753 |
| Dividends on common shares | **12,261** | 8,577 |
| Purchase of minority shareholders' interests in subsidiary companies | **819** | — |
| Purchase of preference shares for cancellation | **523** | 595 |
| Investment in affiliated company | **1,191** | — |
| Reduction of long term debt: | | |
| Rio Algom Mines Limited debentures | **1,712** | 2,288 |
| Bank loans of subsidiaries | **30,575** | 24,775 |
| 8¾% Notes of subsidiary | **9,453** | 253 |
| Housing loans of subsidiary (net) | **177** | 319 |
| | **71,686** | 46,811 |
| INCREASE IN WORKING CAPITAL | **21,595** | 66,124 |
| Working Capital, beginning of year | **133,429** | 67,305 |
| Working Capital, end of year | **$ 155,024** | $ 133,429 |

## Notes to Consolidated Financial Statements

**DECEMBER 31, 1974**

1. ACCOUNTING POLICIES

The information on page 17 presents a summary of certain accounting policies and is an integral part of these financial statements.

2. INVENTORIES AND CONCENTRATES AWAITING SHIPMENT

| | 1974 | 1973 |
|---|---|---|
| Mining operations — | | |
| Mine supplies | **$ 11,756,111** | $ 7,893,810 |
| Concentrates awaiting shipment | **64,415,284** | 53,016,251 |
| | **76,171,395** | 60,910,061 |
| Steel operations — | | |
| Steel, other metals, raw materials and supplies | **75,880,031** | 47,888,019 |
| | **$152,051,426** | $108,798,080 |

3. PLANT AND EQUIPMENT

| | 1974 | 1973 |
|---|---|---|
| Buildings, machinery and equipment and construction in progress, at cost | **$319,265,059** | $308,968,297 |
| Less accumulated depreciation | **159,814,264** | 147,972,557 |
| | **159,450,795** | 160,995,740 |
| Land, at cost | **1,372,829** | 1,055,783 |
| | **$160,823,624** | $162,051,523 |

Plant and equipment includes $59,467,575 in respect of assets of mines presently idle which have been fully depreciated.

4. MINING PROPERTIES AND PREPRODUCTION EXPENDITURES

| | 1974 | 1973 |
|---|---|---|
| Mining properties, at cost | **$ 9,195,373** | $ 9,165,603 |
| Less accumulated amortization | **6,647,636** | 6,310,168 |
| | **2,547,737** | 2,855,435 |
| Preproduction expenditures, at cost less amortization | **49,069,276** | 53,182,721 |
| | **$ 51,617,013** | $ 56,038,156 |

5. LONG TERM DEBT

| | 1974 | 1973 |
|---|---|---|
| (a) Rio Algom Mines Limited: | | |
| 5¾% Sinking Fund Debentures Series A, maturing on April 1, 1983 | **$ 26,009,000** | $ 27,712,000 |
| Less portion included in current liabilities | **9,000** | — |
| | **$ 26,000,000** | $ 27,712,000 |

The Company is required to make sinking fund payments for the retirement of the Sinking Fund Debentures in principal amounts as follows:

$2,000,000 on October 1, 1975 to 1978 inclusive; and
2,500,000 on October 1, 1979 to 1982 inclusive.

During the year $1,703,000 principal amount was purchased for cancellation, making a total of $1,991,000 principal amount purchased on account of the 1975 requirement.

(b) Subsidiary companies:

| (i) Lornex Mining Corporation Ltd. | 1974 | 1973 |
|---|---|---|
| Bank loans | $ — | $ 33,595,000 |
| Less portion included in current liabilities | — | 4,270,000 |
| Long term portion | — | 29,325,000 |
| 8¾% Notes | **22,699,346** | 26,583,233 |
| Less portion included in current liabilities | **5,822,000** | 253,173 |
| Long term portion (1974 — $16,665,780 U.S.; 1973 — $26,000,000 U.S.) | **16,877,346** | 26,330,060 |
| 8½% Series A Income Debentures due December 31, 1985 | **7,996,000** | 7,996,000 |
| Housing loans | **181,248** | 358,648 |
| Accrued interest on Income Debentures | **2,820,568** | 1,948,004 |
| | **27,875,162** | 65,957,712 |
| (ii) Rio Algom Corporation bank loans | **10,500,000** | 14,000,000 |
| Less portion included in current liabilities | **1,250,000** | 3,500,000 |
| Long term portion (1974 — $9,250,000 U.S.; 1973 — $10,500,000 U.S.) | **9,250,000** | 10,500,000 |
| Total — subsidiary companies | **$ 37,125,162** | $ 76,457,712 |

Under the terms of the Lornex financing agreement 90% of the Lornex net operating profit as defined is to be applied to repayment of the 8¾% Notes. The cumulative minimum repayments of principal required to be made are as follows:

| Due In | |
|---|---|
| 1975 | $ 750,000 U.S. |
| 1976 | 1,000,000 U.S. |
| 1977 | 1,250,000 U.S. |
| 1978 | 8,350,000 U.S. |
| 1979 | 21,650,000 U.S. |
| 1980 | 26,500,000 U.S. |

To December 31, 1974 repayments totalling $3,954,000 U.S. have been made on the 8¾% Notes, thereby reducing the cumulative minimum repayments shown above by that amount; the cumulative repayments of $750,000 U.S. due in 1975 have thus been more than satisfied.

The 8½% Lornex Income Debentures and the accrued interest thereon may not be paid until the required interest and principal repayments have been made and certain other conditions have been met with respect to the 8¾% Notes. The principal amount of the Income Debentures is to be repaid by way of annual sinking fund payments after the 8¾% Notes have been paid in full.

The Rio Algom Corporation bank loans are repayable in eleven consecutive quarterly instalments of $312,500 U.S. each due March 31, 1975 through September 30, 1977, and one final instalment of $7,062,500 U.S. due December 31, 1977. The interest rate shall be the First National City Bank base rate plus ¾% on amounts due through September 30, 1977 and base rate plus 1% on amounts due December 31, 1977; at December 31, 1974 the base rate was 10%.

## 6. CAPITAL STOCK

Authorized:

470,118 First Preference Shares with a par value of $100 each, issuable in series
15,000,000 Common Shares without par value

| Issued: | 1974 | 1973 |
|---|---|---|
| 120,118 $5.80 Cumulative Redeemable First Preference Shares Series A (127,473 at December 31, 1973) (redeemable at premiums ranging from 3¼% to 1%) | **$ 12,011,800** | $ 12,747,300 |
| 12,261,139 Common Shares (12,258,639 at December 31, 1973) | **72,741,344** | 72,679,744 |
| | **$ 84,753,144** | $ 85,427,044 |

(i) During the year:

(a) 2,500 Common Shares were issued for $61,600 cash under a Stock Option Plan; and

(b) 7,355 First Preference Shares were purchased for cancellation; the Company's 1974 and 1975 obligations referred to in Note 7 (iii) below have been fulfilled.

(ii) At December 31, 1974, 88,045 Common Shares were reserved under a Stock Option Plan. Outstanding options have been granted to employees to purchase 63,295 common shares at prices varying from $24.64 to $28.35 per share; these options expire on varying dates from March 30, 1977 to April 13, 1983.

(iii) There are restrictions on the payment of dividends in the provisions attaching to the Preference Shares and the Company's trust indenture relating to the Series A Debentures.

## 7. COMMITMENTS AND CONTINGENT LIABILITIES

The following commitments and contingent liabilities were outstanding at December 31, 1974:

(i) Estimated total cost to complete capital projects was approximately $29,379,000 (committed $13,350,859).

(ii) Minimum annual rentals upon real property with original lease terms extending beyond December 31, 1977, amounted to approximately $820,000.

(iii) The Company is obligated on April 1 in each year to set aside $300,000 as a retirement fund, to be used to purchase or redeem Preference Shares; and

(iv) Unfunded liability for pension funds at December 31, 1974 was estimated at $2,959,000. This is presently being funded over a period of 14 years as follows:

(i) $444,600 for 1975;
(ii) $294,700 per annum for 1976 and 1977;
(iii) $268,100 for 1978;
(iv) $264,700 per annum for 1979 to 1988.

## 8. REMUNERATION OF DIRECTORS AND SENIOR OFFICERS

During the year ended December 31, 1974 the aggregate direct remuneration paid or payable by the Company and its consolidated subsidiaries to the Directors and Senior Officers of the Company was $725,116.

## 9. DEPRECIATION AND AMORTIZATION

| This consists of the following provisions: | 1974 | 1973 |
|---|---|---|
| Plant and equipment | **$ 14,757,936** | $ 14,427,197 |
| Mining properties and preproduction expenditures | **5,153,177** | 5,378,761 |
| Excess of acquisition cost over adjusted book value of Atlas Steels assets acquired | **1,047,100** | 1,047,100 |
| | **$ 20,958,213** | $ 20,853,058 |

# SUPPLEMENTARY INFORMATION

## Five Year Review

### Rio Algom Mines Limited and Subsidiaries

| | 1974 | 1973 | 1972 | 1971 | 1970 |
|---|---|---|---|---|---|
| PRODUCTION DATA: | | | | | |
| Uranium in concentrate (pounds — 000's) | **6,194** | 6,166 | 5,397 | 4,492 | 3,995 |
| Copper in concentrate (pounds — 000's) | **144,156** | 129,800 | 52,680 | 37,326 | 35,239 |
| Molybdenum in concentrate (pounds — 000's) | **4,038** | 3,481 | 581 | — | — |
| Steel (tons — 000's) | **189** | 182 | 159 | 140 | 155 |
| FINANCIAL DATA: ($000's) | | | | | |
| Revenue: | | | | | |
| **Mining Operations** | | | | | |
| Uranium | **$ 68,232** | $ 53,887 | $ 41,950 | $ 31,937 | $ 26,448 |
| Copper and associated metals | **96,586** | 97,641 | 21,626 | 14,920 | 17,965 |
| | **164,818** | 151,528 | 63,576 | 46,857 | 44,413 |
| **Steel Operations** | | | | | |
| Stainless steels | **118,283** | 74,400 | 61,300 | 57,965 | 75,517 |
| Machinery steels | **39,245** | 28,000 | 22,900 | 17,658 | 18,111 |
| Other steels and metals | **68,225** | 60,992 | 48,389 | 45,549 | 45,484 |
| | **225,753** | 163,392 | 132,589 | 121,172 | 139,112 |
| Total revenue | **390,571** | 314,920 | 196,165 | 168,029 | 183,525 |
| Investment and other income | **5,548** | 2,438 | 683 | 580 | 1,519 |
| | **396,119** | 317,358 | 196,848 | 168,609 | 185,044 |
| Cost of mine production and steel sales | **219,855** | 172,475 | 136,168 | 122,381 | 131,187 |
| Selling, general and administration | **37,050** | 30,332 | 21,743 | 19,497 | 22,878 |
| Interest costs | **8,904** | 11,840 | 4,733 | 2,307 | 2,167 |
| Depreciation and amortization | **20,958** | 20,853 | 12,943 | 10,809 | 9,862 |
| Exploration | **5,143** | 3,125 | 2,447 | 2,385 | 2,006 |
| | **291,910** | 238,625 | 178,034 | 157,379 | 168,100 |
| Earnings before taxes and minority interests — mining | **69,693** | 65,883 | 17,424 | 10,899 | 8,061 |
| — steel | **34,516** | 12,850 | 1,390 | 331 | 8,883 |
| — total | **104,209** | 78,733 | 18,814 | 11,230 | 16,944 |
| Income and mining taxes | **50,619** | 12,353 | 2,935 | 1,943 | 1,491 |
| | **53,590** | 66,380 | 15,879 | 9,287 | 15,453 |
| Minority interests in profits (losses) of subsidiaries | **9,766** | 14,320 | (429) | (411) | 47 |
| | **43,824** | 52,060 | 16,308 | 9,698 | 15,406 |
| Extraordinary items | **—** | — | — | — | 1,330 |
| Net earnings | **$ 43,824** | $ 52,060 | $ 16,308 | $ 9,698 | $ 14,076 |
| Earnings per share of common stock | **$ 3.52** | $ 4.19 | $ 1.27 | $ .73 | $ 1.08 |
| Dividends paid on common stock (000's) | **$ 12,261** | $ 8,577 | $ 4,900 | $ 4,900 | $ 4,900 |
| Per share of common stock | **$ 1.00** | 70¢ | 40¢ | 40¢ | 40¢ |
| Common shares outstanding (000's) | **12,261** | 12,259 | 12,250 | 12,250 | 12,250 |
| Equity per share of common stock | **$ 20.45** | $ 17.92 | $ 14.41 | $ 13.54 | $ 13.21 |
| Number of shareholders | **13,000** | 13,500 | 14,700 | 16,500 | 17,150 |
| Capital expenditures (000's) | **$ 14,261** | $ 9,251 | $ 33,218 | $ 89,734 | $ 32,603 |
| Number of employees | **5,362** | 5,450 | 5,302 | 4,860 | 5,198 |

Note: Lornex and Lisbon mines commenced operations October 1, 1972.

## Management Discussion and Analysis

In 1971 a decrease of $8,552,000 in steel earnings before taxes was due primarily to deterioration in steel markets in terms of both volume and price; this was partially offset by an improvement of $2,838,000 in pre-tax earnings of mining operations resulting mainly from higher uranium production. Investment and other income was substantially reduced due to lower rates of interest on a reduced amount of funds available for investment.

In 1972 earnings before taxes and minority interests from mining operations increased by $6,525,000 mainly due to higher uranium production and improved uranium sales mix. Pre-tax earnings from steel operations increased $1,059,000 due to lower costs, including staff reduction, and product rationalization programs whereby less profitable product lines were reduced or eliminated. Interest and depreciation and amortization charges were increased as a result of Lornex and Lisbon mines commencing operations on October 1, 1972. The increased taxes were mainly the result of higher earnings in mining operations.

In 1973 earnings from mining operations before taxes and minority interests increased by $48,459,000 primarily because of the contribution of the Lornex copper-molybdenum mine which was not in production in the first three quarters of 1972 and higher copper and uranium prices. Pre-tax earnings of steel operations improved by $11,460,000 due mainly to operational improvements, strong demand for stainless and specialty steels and to increases in selling prices on a broad range of products. Income and mining taxes increased by $9,418,000, most of which resulted from the first full year's operation of Lornex. Part of the increase was due to the Company's first provision for deferred Canadian income taxes in the amount of $2,800,000.

In total, earnings before taxes and minority interests in 1974 increased by $25,476,000 of which $3,810,000 occurred in mining operations and $21,666,000 in steel operations. Earnings from mining operations increased primarily because of higher uranium earnings and improved volume and grade at Lornex, largely offset by lower copper prices. Earnings from steel operations improved mainly due to increased volume, improved product mix and higher selling prices. These improvements were more than offset by an increase of $38,266,000 in income and mining taxes, including government royalty, partly due to increased earnings before taxes; these taxes were proportionately much higher in 1974 primarily because of higher provision by Rio Algom for income tax, provision by Lornex for British Columbia government royalty effective January 1, 1974, the expiry of the Lornex tax exempt period on December 31, 1973, the introduction of increased Ontario mining taxes effective April 9, 1974 and provision for the effect of the Canadian Federal Budget proposals of November 18, 1974, some of which are retroactive to May 6, 1974.

## Price Range of Common Shares

The following table indicates the high and low closing prices for Rio Algom Common Shares on The Toronto Stock Exchange for the periods indicated, as reported by *The Toronto Stock Exchange Review.*

| | | High | Low |
|---|---|---|---|
| 1973 | 1st Quarter | 27-7/8 | 19 |
| | 2nd Quarter | 28 | 24-1/8 |
| | 3rd Quarter | 30-6/8 | 26 |
| | 4th Quarter | 36-6/8 | 27 |
| 1974 | 1st Quarter | 37-2/8 | 33-2/8 |
| | 2nd Quarter | 33-3/8 | 24-4/8 |
| | 3rd Quarter | 29-6/8 | 20-6/8 |
| | 4th Quarter | 24 | 18-7/8 |

## Comparative Consolidated Earnings by Operation

**YEAR ENDED DECEMBER 31, 1974**

($000's omitted)

| MINING | **1974** | 1973 |
|---|---|---|
| Revenue from mine production | **$ 164,818** | $ 151,528 |
| Expenses: | | |
| Cost of production and administration | **73,272** | 59,253 |
| Depreciation and amortization | **14,236** | 14,355 |
| Exploration | **5,143** | 3,125 |
| Interest costs (net) | **2,474** | 8,912 |
| Total expenses | **95,125** | 85,645 |
| Earnings before minority interests and taxes | **69,693** | 65,883 |
| Income and mining taxes and government royalty | **36,570** | 10,679 |
| | **33,123** | 55,204 |
| Minority interests | **9,766** | 14,293 |
| Net earnings for the year | **23,357** | 40,911 |
| STEEL | | |
| Revenue from sales of steel and other products | **225,753** | 163,392 |
| Expenses: | | |
| Cost of sales, selling and administration | **183,633** | 143,554 |
| Depreciation and amortization | **6,722** | 6,498 |
| Interest costs (net) | **882** | 490 |
| Total expenses | **191,237** | 150,542 |
| Earnings before minority interests and taxes | **34,516** | 12,850 |
| Income taxes | **14,049** | 1,674 |
| | **20,467** | 11,176 |
| Minority interests | **—** | 27 |
| Net earnings for the year | **20,467** | 11,149 |
| CONSOLIDATED NET EARNINGS FOR THE YEAR | **$ 43,824** | $ 52,060 |

NOTE:

Interest costs, net of investment and other income, and income taxes incurred directly by those mining and steel operations which are separate legal entities have been included in mining and steel operations as applicable. The parent company interest costs (net) have been allocated to mining and steel operations on the basis of total assets less liabilities of those operations; parent company income taxes have been allocated to its mining and steel operations in the ratio of earnings of each operation before income and mining taxes. Parent company administrative and general expenses have been allocated to mining operations and to steel operations on a basis commensurate with the administration provided.

## Rio Algom Operations and Affiliates

### Canada

MINING

Head Office—Toronto, Ontario

New Quirke, Elliot Lake, Ontario

Mines de Poirier, Joutel, Quebec

Lornex Mining Corporation Ltd., Vancouver, B.C., Property at Logan Lake, B.C.

EXPLORATION

Rio Tinto Canadian Exploration Limited, (Riocanex)

Head Office—Toronto, Ontario

Branch and Field Offices—Vancouver, B.C., Kamloops, B.C., Truro, Nova Scotia

STEEL

Atlas Steels Company

Head Office—Welland, Ontario

Plants at Welland, Ontario and Tracy, Quebec

METAL DISTRIBUTION

Atlas Alloys

Head Office—Etobicoke, Ontario

Service Centres at Etobicoke, Winnipeg, Montreal, Windsor, Edmonton, Vancouver

Mesa Manufacturing—Calgary, Alberta

### United States

MINING

Rio Algom Corporation,

Head Office—Wilmington, Delaware
Property at Moab, Utah

EXPLORATION

Rioamex, Division of Atlas Alloys, Inc., Denver, Colorado

METAL DISTRIBUTION

Atlas Alloys Inc.

Head Office—Cleveland, Ohio

Service Centre at Valley View, Ohio and Detroit, Michigan

### Overseas

METAL DISTRIBUTION

Atlas Alloys Limited, Dunstable, Beds., England

Atlas Steels (Australia) Pty. Limited, Melbourne, Australia

Aceromex-Atlas S.A., Mexico City, Mexico

Agents or Distributors in other countries

## Principal Associates

### Canada

Brinco Limited
One Westmount Square, Montreal, Quebec
Indal Canada Limited
52 Arrow Road, Weston, Ontario

### United Kingdom

The Rio Tinto-Zinc Corporation Limited
Anglesey Aluminium Limited
6 St. James's Square, London, SW1Y 4LD
R.T.Z. Europe Limited
R.T.Z. Pillar Limited
Cleveland House, 19 St. James's Square, London, SW1Y 4JG
A. M. & S. Europe Limited
1 Redcliff Street, Bristol, BS99 7JS
Capper Pass & Son Limited
Melton Works, North Ferriby, Yorkshire
R.T.Z. Borax Limited
Borax House, Carlisle Place, London, SW1P 1HT

### Commonwealth of Australia

Conzinc Riotinto of Australia Limited
Australian Mining & Smelting Limited
The Zinc Corporation Limited
The Broken Hill Associated Smelters Pty. Limited
Sulphide Corporation Pty. Limited
Queensland Alumina Limited
Comalco Limited
Hamersley Iron Pty. Limited
Mary Kathleen Uranium Ltd.
Bougainville Copper Limited
95 Collins Street, Melbourne, 3001, Victoria

### Republic of South Africa

Rio Tinto South Africa Limited
Palabora Mining Company Limited
Rossing Uranium Limited
70 Marshall Street, Johannesburg

### United States of America

Rio Tinto-Zinc Corporation of America
P.O. Box 1188, Christina Avenue
Wilmington, Delaware 19899
Ireco Chemicals
Suite 726, Kennecott Bldg.,
East South Temple Street,
Salt Lake City, Utah 84111
United States Borax & Chemical Corporation
3075 Wilshire Boulevard, Los Angeles
California 90005

### Spain

Union Explosivos Rio Tinto S.A.
Paseo De La Castellana, 20 Madrid 1

### Japan

Rio Tinto-Zinc (Japan) Limited
Shin Tokyo Building,
3-1 Marunouchi, 3 Chome, Chiyoda-Ku,
Tokyo 100

## Miscellaneous Corporate Information

**Head Office**
120 Adelaide St. West, Toronto, Ontario, Canada
M5H 1W5

**Principal Bankers**
Canadian Imperial Bank of Commerce, Toronto
The Toronto-Dominion Bank, Toronto
First National City Bank, New York

**Solicitors**
Fasken & Calvin, Toronto
Fried, Frank, Harris, Shriver and Jacobson, New York

**Auditors**
Coopers & Lybrand, Chartered Accountants, Toronto

**Registrars and Transfer Agents**
Common Shares
Canada Permanent Trust Company, Toronto, Montreal, Winnipeg, Calgary and Vancouver

The Canadian Bank of Commerce Trust Company, New York

Preference Shares
Canada Permanent Trust Company, Toronto, Montreal, Halifax, Winnipeg and Vancouver

**Shares Listed**
Common Shares
Toronto Stock Exchange, Toronto
Montreal Stock Exchange, Montreal
American Stock Exchange, New York

Preference Shares
Toronto Stock Exchange, Toronto
Montreal Stock Exchange, Montreal

**Form 10-K Annual Report**
The Company's Form 10-K annual report for 1974 to the United States Securities and Exchange Commission will be available after April 30, 1975 on written request to the Secretary of the Company.

Printed in Canada.