

Rio Algom and its subsidiaries are engaged in two principal lines of business: mining operations and steel operations.

Rio Algom's mining operations consist of the exploration for and mining of ores and minerals and its principal products are uranium oxide, copper and molybdenum. Uranium oxide in concentrates is produced from the Quirke and Panel mines at Elliot Lake, Ontario and, through a wholly owned subsidiary, the Lisbon mine near Moab, Utah. Copper and molybdenum in concentrates is produced from the Lornex Mining Corporation Ltd. (68.1% owned by Rio Algom) mine located in the Highland Valley area of British Columbia.

The steel operations consist of the production and marketing of stainless and specialty steels. Production is carried on through the Atlas Steels division at plants in Welland, Ont. and Tracy, Que. and marketing is carried on directly by the Atlas Steel mill sales group and through Atlas Alloys division service centre distribution network with offices across Canada, and in U.S.A., U.K., Mexico and Australia.

Rio Algom Limited

Highlights of 1980 Consolidated Operations (In thousands except where noted by asterisk)		1980		1979
Revenue:				
Uranium	\$225,855	27%	\$157,206	22%
Copper-molybdenum	173,738	20	190,572	27
Steel	447,898	53	362,951	51
Consolidated revenue	\$847,491	100%	\$710,729	100%
Operating profit:				
Uranium	\$ 26,404	15%	\$ 43,265	22%
Copper-molybdenum	96,904	56	124,296	62
Steel	49,387	29	31,694	16
Total operating profit	\$172,695	100%	\$199,255	100%
Net earnings		\$ 77,488		\$ 75,694
Per share of common stock		\$ 5.20		\$ 5.02
Dividends paid on common stock		\$ 21,332		\$ 19,342
Per share of common stock		\$ 1.50		\$ 1.50
Working capital, year end		\$285,218		\$221,338
Ratio of current assets to current liabilities*		2.8 to 1		2.3 to 1
Common shareholders' equity		\$447,974		\$395,627
Return on average common shareholders' equity *		17.53%		19.43%
Total common shares outstanding at December 31		14,221		14,221
Equity per share of common stock outstanding*		\$ 31.50		\$ 27.82
Production				
Uranium oxide (pounds)		7,882		5,454
Copper in concentrate (pounds)		126,346		134,194
Molybdenum in concentrate (pounds)		4,813		4,436
Steel (tons)		180		193
Number of employees at December 31 *		7,378		6,878
Cover: Stanleigh uranium Annual Meeting mine headframe under An Annual Meeting of	Contents			

construction at Elliot Lake. The program to bring the mine into production got underway in 1979. Design average milling rate is planned for 1984 at 5,000 tons of ore per day.

An Annual Meeting of Shareholders of Rio Algom Limited will be held on Wednesday, April 29, 1981 at 10:00 a.m. (Toronto time) in the Governor General Suite, The Westin Hotel, 145 Richmond Street West, Toronto, Ontario, Canada.

Directors' Report to the Shareholders	2
	5
Auditors' Report to the Shareholders	5
Accounting Policies	5
Consolidated Financial Statements	
Notes to Consolidated Financial Statements 3	(
Supplementary Information	
—Quarterly Financial Data	7
—Market Price Range of Common Shares	
and Dividends	7
—Ten Year Review	8
-Management's Discussion and Analysis of	
Financial Condition and Results	
of Operations	
Operations	
Corporate Information	7
Directors and Officers	4

Directors' Report to the Shareholders

Revenues for 1980 increased by 19% over the levels attained in 1979 and were the highest in the Corporation's history. Earnings, while they did not increase proportionately, also established a new record, and were achieved in a generally difficult economic and financial environment. Revenue and net earnings have increased each year for the last six years and in 1980 total assets exceeded one billion dollars for the first time. Major expansion and productivity improvement programs affecting all key sectors of the Corporation continued, creating a broader and stronger base for the future.

On March 17, 1981 agreement was reached between Westinghouse Electric Corporation and a group of companies, including Rio Algom, and between Tennessee Valley Authority and a group of companies, including Rio Algom, to settle the civil anti-trust actions in relation to uranium marketing brought by Westinghouse and TVA in the United States. The agreements also provide for the dismissal of related actions brought in Canada by Rio Algom against TVA and Westinghouse. The settlements will remove major constraints on Rio Algom's business interests in the United States and end the sterile use of executive time and the payment of increasing legal costs. Before these settlements become final certain judicial and other formal procedures must be completed and approvals obtained from various governments. Rio Algom believes that these requirements should be satisfied shortly and has obtained, where applicable, favourable opinion of independent legal counsel in this regard. Further particulars of the settlements are given in note 9 to the consolidated financial statements.

As described in note 1, the consolidated financial statements for 1979 are not fully comparable with those of 1980 and 1978.

Rio Algom Limited and Preston Mines Limited, its affiliated corporation, were amalgamated on January 30, 1980 and the amalgamation has been accounted for in a manner similar to a pooling of interests. The attached financial results are those of the amalgamated corporation, including the restatement of the 1979 and 1978 data.

Financial Position

Consolidated revenue for 1980 was \$847.5 million, compared with \$710.7 million in 1979. Net earnings in 1980 were \$77.5 million (\$5.20 per common share), somewhat higher than the previous year's level of \$75.7 million (\$5.02 per common share). Dividends paid on common stock at \$1.50 per share maintained the 1979 level. Common shareholders' equity increased to \$448.0 million (\$31.50 per share)

at December 31, 1980 from a restated \$395.6 million (\$27.82 per share) a year earlier.

Earnings before income and mining taxes and interests of minority shareholders in the net earnings of Lornex fell from \$178.7 million in 1979 to \$161.6 million in 1980. Lornex and uranium operating profits were both lower, more than offsetting higher investment income and a significant improvement in the earnings of Atlas Steels, which in 1979 had been adversely impacted by a nine-month strike at the Tracy, Quebec plant. However, lower effective tax rates (39% in 1980 compared with 47% in 1979) resulting from expansion-related expenditures, principally at Lornex and Elliot Lake, and from the amalgamation of Rio Algom and Preston, offset the reduction in pre-tax earnings sufficiently to raise net earnings above those achieved in 1979.

At the end of 1980 cash and short term deposits were \$96.1 million. The maintenance of a strong liquid position was accomplished against the background of major capital expenditure programs, principally at Lornex and Elliot Lake. The capacity of the Lornex facility will increase by approximately 68% after completion of the project, currently scheduled for mid-1981. Capital expenditures for uranium operations were mainly related to the development of the Stanleigh mine and related facilities at Elliot Lake. This project is being funded wholly by Ontario Hydro and through mortgages on the housing properties associated therewith. Total consolidated capital expenditures for the Corporation in 1980 were \$182.2 million.

Outlook

The economy of Canada weakened during 1980, especially in residential construction and automobile manufacture. The United States and key overseas countries suffered sharp declines in activity as well. General economic prospects for 1981 are not encouraging, at least in the short term. Real growth in Canada may be no more than 1 to 2%.

Against this general background, it is pertinent to review the key influences that affected the Corporation's 1980 operations and which are likely to impact those of 1981. Copper prices averaged U.S. \$0.99 per pound in 1980 (based on average monthly London Metal Exchange prices), as compared to U.S. \$0.90 in 1979. For 1981, conditions generally are likely to produce prices somewhat lower than the average for 1980. Prices for molybdenum fell sharply in 1980 reflecting a return to historical price levels. For 1981 it is expected that prices are likely to continue near present levels.

These metal price influences are of major

consequence to Lornex' profitability in 1981. The expansion program is proceeding well and will improve Lornex' position as an efficient low-cost producer of both copper and molybdenum.

Earnings from the Elliot Lake uranium operations declined in 1980 compared to 1979 primarily reflecting problems during the start-up of the Panel mine and mill; Panel now is operating well. Also, during 1980, the Corporation was able to secure new contracts covering 8.1 million pounds of U₃O₈. A further 4 million pounds will be sold to Westinghouse under the settlement agreement referred to previously.

Atlas Steels, with operations at Welland, Ontario and Tracy, Quebec, had a satisfactory year in 1980 despite operating at volumes short of capacity. The favourable result was attributable to the cost-effective facilities created by recent capital expenditure programs, such as the new Welland melt shop. This standard of performance reinforces the case for further expansion and productivity-related capital programs in the years ahead to maintain the competitive position of Atlas Steels.

The metal service centres of Atlas Alloys, while enjoying an increase in sales, suffered from lower trading margins in North America, reflecting reduced activity in some of the key markets served.

The operations of both Atlas Steels and Atlas Alloys are closely related to the state of the Canadian economy generally. The reduced level of activity experienced during the latter part of 1980 is likely to persist during the first half of 1981, since any improvement in the level of economic activity is not expected to occur until later in the year.

Directors and Organization

Mr. Robert D. Armstrong, a director since 1966, and President from that time until 1975 when he became Chairman and Chief Executive Officer will, under the retirement policy of Rio Algom, retire as a director and officer of the Corporation at the Annual Meeting on April 29, 1981. Mr. Armstrong has been chief executive of the Corporation during the period when Rio Algom established itself as a successful, diversified, major Canadian corporation. His fellow directors record their appreciation for the distinguished manner in which he has served the interests of the Corporation.

It is intended that, following the Annual Meeting, Mr. George R. Albino, a director since 1968 and President and Chief Operating Officer since 1975, will also be elected Chairman and Chief Executive Officer.

Mr. John G. Edison, a director since 1960, and

Mr. J. Ian Crookston, a director since 1966, 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. Edison and Crookston for their dedication and the valuable contributions which they have made to the affairs of the Corporation.

Rio Algom suffered grievous losses with the deaths of Sir Mark Turner on December 13, 1980 and Mr. Sam Harris on November 13, 1980. Sir Mark, a director since 1961, was Chairman of The Rio Tinto-Zinc Corporation Limited and deeply involved in the affairs of Rio Algom from its inception. Mr. Harris served the Corporation with great dedication as a director since 1961. Both are missed as colleagues and friends.

On March 20, 1981 Sir Anthony Tuke, Chairman of The Rio Tinto-Zinc Corporation Limited, was appointed a director of the Corporation. At the Annual Meeting it is intended that the remaining vacancies on the Board will be filled by the election of Mr. James T. Black, President and Chief Executive Officer of The Molson Companies Limited, Mr. Douglas C. New, an Associate of Fasken & Calvin, Mr. J. Keith Reynolds, Chairman of the Metropolitan Toronto and Region Conservation Authority and Mr. John D. Taylor, President and Chief Operating Officer of Simpsons-Sears Limited.

In April, 1980 Mr. Stanley B. Kerr joined Rio Algom as Senior Vice-President, Finance. Also, in April, 1980 Mr. J. Douglas French was appointed Controller and Mr. Guenter Feucht was appointed Vice-President, Manufacturing, Atlas Steels. Mr. Herbert A. Pakrul, formerly Vice-President, Controller, was elected President of Sage Creek Coal Limited, in which Rio Algom has a 60% interest; he remains a Vice-President of Rio Algom.

Appreciation

The year's operating results, the continuing strong financial position, and the major capacity increases being put in place are all the results of the dedicated efforts of the people engaged in the various enterprises of the Corporation. To all of them the Directors wish to express their appreciation.

On behalf of the Board of Directors

R. D. Armstrong Chairman and Chief Executive Officer

G. R. Albino
President and
Chief Operating Officer

Toronto, Canada

March 20, 1981



Review of Operations

Mining

Revenue from mine production was \$399.6 million in 1980 compared to \$347.8 million in 1979. Operating profit from mining operations before interest and taxes and minority interests was \$123.3 million compared to \$167.6 million in 1979.

The revenue and operating profit figures for 1980 and 1979 are not fully comparable because, as explained in Rio Algom's accounting policies, the 1979 figures do not include the revenue and operating profit of Rio Algom Corporation, a subsidiary of Rio Algom, which operates the Lisbon mine located near Moab, Utah in the United States.

Uranium

Revenue from uranium mining operations was \$225.9 million in 1980 compared to \$157.2 million in 1979. Operating profit before interest and taxes was \$26.4 million in 1980 compared to \$43.3 million in 1979.

Uranium — Elliot Lake

Revenue from the Elliot Lake mines increased mainly because of higher production. The output of the Panel mine, which commenced commercial operations in November 1979, more than offset a decline in production from the Quirke mine

resulting from lower recovered grades. Earnings were lower because of increased costs, including higher amortization charges, largely in connection with problems during the start-up of the Panel mine and mill.

Comparative milling, metallurgical, production and shipping data from uranium operations in Canada for the years 1980 and 1979 are as follows:

	Quirk	ce	Pan	el
	1980	1979	1980	1979(1
Tons of ore processed (thousands)	2,434(2)	2,452(2)	1,006	143
Average tons processed per day	6,975	7,004	2,883	2,419
Average recovery per ton (lbs.)	2.1	2.3	1.7	1.2
Average recovery	95.5%	93.8%	88.2%	65.9%
Pounds of uranium oxide produced (thousands)	4,886	5,294	1,897	394(3
Pounds of uranium oxide delivered (thousands)	5,978(4)	4,739(4)	_	

- (1) Panel mine commenced commercial operations in November 1979.
- (2) 1980 includes 94,000 tons and 1979 includes 104,000 tons of Panel ore processed.
- (3) Includes 234,000 pounds produced during the Panel preproduction period.

(4) Includes deliveries from both Quirke and Panel.

Stanleigh construction. Steel goes up for the erection of surface facilities at the Stanleigh uranium mine.



New Quirke Mine. The Quirke operation had a successful year despite a shortage of skilled personnel.



Dam is constructed to hold fresh water supply for the Stanleigh mine-mill complex.



The Quirke operation had a successful year despite shortages of skilled miners and mine maintenance personnel. Mill efficiency reached an all time high with recoveries averaging 95.5%. The Panel operation reached its design capacity of 3,300 tons of ore per day during the fourth quarter of the year and is now operating well. The design rate was not reached earlier because of equipment and metallurgical problems encountered after start-up and a shortage of skilled maintenance personnel.

In 1975 a housing program was initiated to provide accommodation for the 1,500 additional people required for the expanded operations at Quirke and Panel. At December 31, 1980 a total of 1,263 housing units had been completed, of which 119 units were completed in 1980. In 1978 a second housing program was started to provide accommodation for the up to 1,100 people who will be directly employed when full production is achieved at the Stanleigh mine. At December 31, 1980 a total of 106 housing units had been completed under this program. In addition Rio Algom, together with another uranium mining company, entered into agreements in 1980 with the Town of Elliot Lake providing for financial assistance to the town to augment and improve the existing sewage and water systems in order that further residential lands may be developed to accommodate the necessary housing. Development of the lands should be commenced by mid-1981 and completion of up to 164 housing units on such lands is scheduled for 1981.

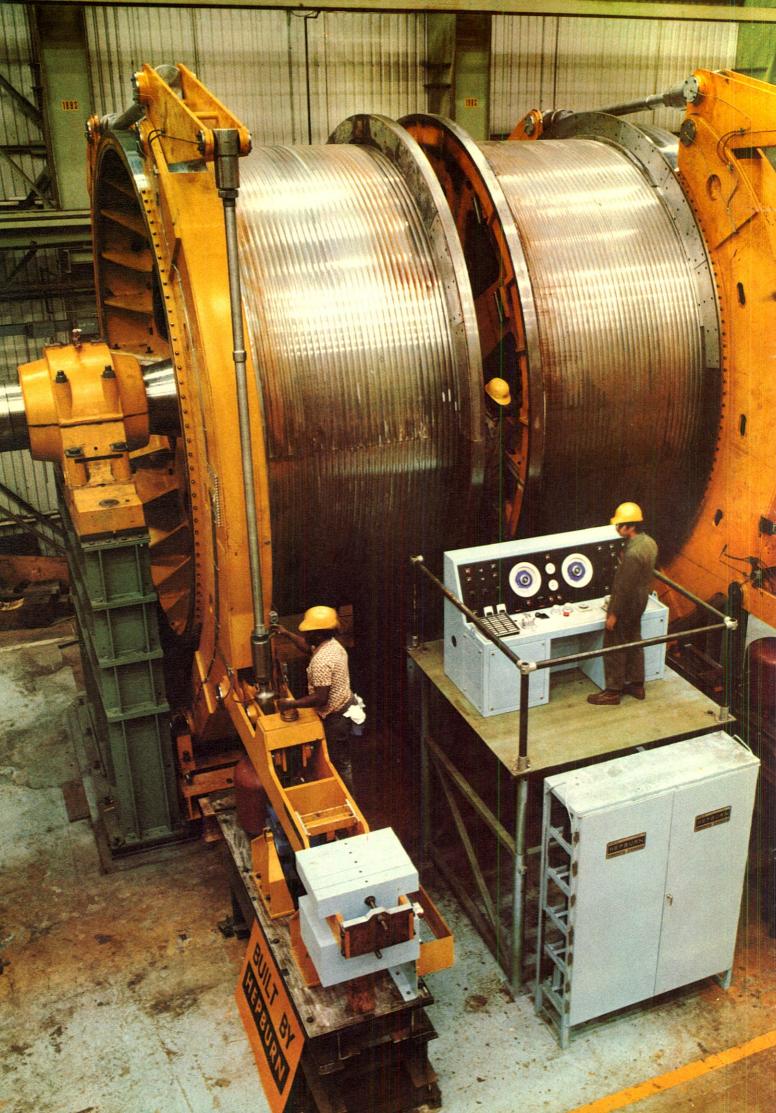
Construction and development work on the closed down Stanleigh mine and mill which began in 1979 is on schedule. It is expected to be substantially completed in mid-1983 and to reach its design average milling rate of approximately 5,000 tons of ore daily in early 1984. During the year dewatering of the mine continued and underground development was started following installation of the service hoist. At the main shaft the production headframe and its associated service hoist were completed and work commenced on refurbishing the shaft itself. Engineering design work for the surface facilities was 75% completed during 1980. The water supply sources and design of the collection system were approved by the regulatory authorities following which construction and installation of the main dam and pumping systems were completed.

During 1980 new sales contracts were obtained for the delivery of 8.1 million pounds of uranium oxide. At December 31, 1980 approximately 58.9 million pounds of uranium oxide remained to be

Top sections of Stanleigh mine's production headframe are bolted into place. Development work and construction at the property is on schedule.



Quirke mill efficiency reached an all-time high in 1980. The mill's capacity was increased in 1978 to 7,000 tons of ore per day from the previous 4,500 tons. Current ore milling capacity in Elliot Lake now stands at 10,300 tons of ore per day



delivered from Quirke and Panel operations under present contracts and, as stated in note 9 to the consolidated financial statements, 4 million pounds are to be sold and delivered to Westinghouse Electric Corporation. In addition, approximately 72 million pounds are to be delivered to Ontario Hydro from the Stanleigh mine beginning in 1983 until approximately the year 2020.

The Milliken, Lacnor and Nordic properties which have been shut down for some years contain substantial uranium deposits which may be commercially recoverable depending upon the course of future economic conditions. General studies regarding the most effective means of developing these properties are complete.

At Elliot Lake during 1980 an audit of mine safety practices was initiated by Rio Algom and conducted by an independent expert in mine safety. This auditor was selected in co-operation with representatives of the Ontario Ministry of Labour and the United Steelworkers of America, bargaining agent for hourly rated employees at Elliot Lake. In response to the findings and recommendations of the auditor Rio Algom has initiated a new safety system at Elliot Lake in an effort to further improve the safety record at its operations.

One of the biggest double drum production hoists ever built in Canada will be installed at the Stanleigh uranium mine in Elliot Lake. With a diameter of 16.5 feet and powered by a 5,500 h.p. motor, the hoist will have a payload capacity of 24 tons.

Uranium — Lisbon Mine

Comparative milling, metallurgical, production and shipping data from uranium operations for the years 1980 and 1979 are as follows:

	1980	1979
Tons of ore processed (thousands)	269	273
Average tons processed per day	745	751
Average recovery per ton (lbs.)	4.2	3.7
Average recovery	94.5%	93.6%
Pounds of uranium oxide produced (thousands)	1,099	994
Pounds of uranium oxide delivered (thousands)	940	1,200

The Lisbon operation had a successful year primarily because of the higher average grade of ore treated in accordance with the planned sequence of mining, continuing strict cost controls and improvements in operating efficiencies. At December 31, 1980 approximately 1.2 million pounds of uranium oxide remained to be delivered under the present contract; it is estimated that an additional 1.1 million pounds can be recovered from defined ore. Studies are underway to evaluate the various options with respect to future operations.



Firefighters at Panel mine, one of three such squads at Rio Algom's Elliot Lake operations. A crew is located at each of the operating properties.



Copper-Molybdenum

The results of operations at the coppermolybdenum mine in British Columbia and the financial position of Lornex Mining Corporation Ltd., which is 68.1% owned by Rio Algom, are included with those of Rio Algom on a fully consolidated basis. Rio Algom's interest in Lornex' net earnings in 1980 was \$44.3 million compared to \$39.2 million in 1979.

The comparative operating results of Lornex as an entity are summarized as follows:

(In thousands)	1980	1979
Net revenue from production	\$173,738	\$190,572
Operating expenses	67,235	56,999
Amortization and depreciation	9,865	9,544
	77,100	66,543
Earnings before interest and taxes Investment income (net of	96,638	124,029
interest costs)	12,245	1,868
Earnings before taxes	108,883	125,897
Income and mineral resource taxes	43,770	68,328
Net earnings for year	\$ 65,113	\$ 57,569
Minority shareholders' interests in		
above earnings	\$ 20,771	\$ 18,364

Lornex' earnings of \$65.1 million for 1980 were the highest in its history and 13% above the previous year's record high level of \$57.6 million. The decrease in earnings before interest and taxes to \$96.6 million from \$124.0 million was primarily due to a lower price realized for molybdenum, reduced copper production and increased operating costs. These unfavourable factors were partly offset by higher prices realized for copper and silver and higher production of molybdenum. The gross revenue price realized per payable pound of copper, including foreign exchange gains, averaged Canadian \$1.15 in 1980 compared to Canadian \$1.06 in 1979 and the gross revenue price realized per payable pound of molybdenum, including foreign exchange gains, averaged Canadian \$10.05 in 1980 compared to Canadian \$16.65 in the previous year. 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.

Panel mine, in production after being shut down for 18 years, reached its design capacity of 3,300 tons of ore per day in 1980.



New electric shovel is prepared for service at Lornex where a major expansion is under way.



Steel rods and cranes seem to be everywhere as construction proceeds at a fast pace at Lornex.



Comparative operating data for the years 1980 and 1979 is as 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 — molybdenum	0.411% 0.017%	0.432% 0.017%
Average mill recovery — copper — molybdenum	89.8% 81.4%	90.2% 75.1%
Payable metal in concentrate produced (thousands) — copper (pounds) — molybdenum (pounds) — silver (ounces)	126,346 4,813 507	134,194 4,436 487
Pounds of payable metal in concentrate delivered (thousands) — copper	135,298 4,790	129,632 4,541

The comparative financial position of Lornex as an entity as at December 31 is summarized as follows:

	1980	1979
	(In	thousands)
Cash and short term deposits Receivables and inventories	\$ 42,955 40,661	\$ 77,344 45,956
Current assets	83,616 43,969	123,300 66,743
Working capital	39,647 227,378	56,557 141,431
Total assets less current liabilities	267,025	197,988
Deduct: Housing loans Deferred income and mineral	1,050	1,071
resource taxes	90,945	53,925
	91,995	54,996
Net assets	\$175,030	\$142,992
Minority shareholders' interests in net assets	\$ 55,835	\$ 45,614

Final check is made of 170-ton-capacity truck before it goes into service at Lornex. New equipment includes 18 of these trucks, three 22-yard shovels and three extended-mast drills.



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.



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 earnings before taxes and to greater deductions allowed for tax purposes mainly arising from the substantial increase in capital expenditures incurred for the expansion of facilities.

Net capital expenditures for Lornex in 1980 were \$95.8 million compared to \$8.7 million in the previous year. The 1980 total is comprised of \$84.7 million for expansion of mining and milling facilities, \$3.3 million for a 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 Lornex 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.

A copy of the Lornex Annual Report for 1980, including the complete financial statements and notes thereto, will be provided upon request.

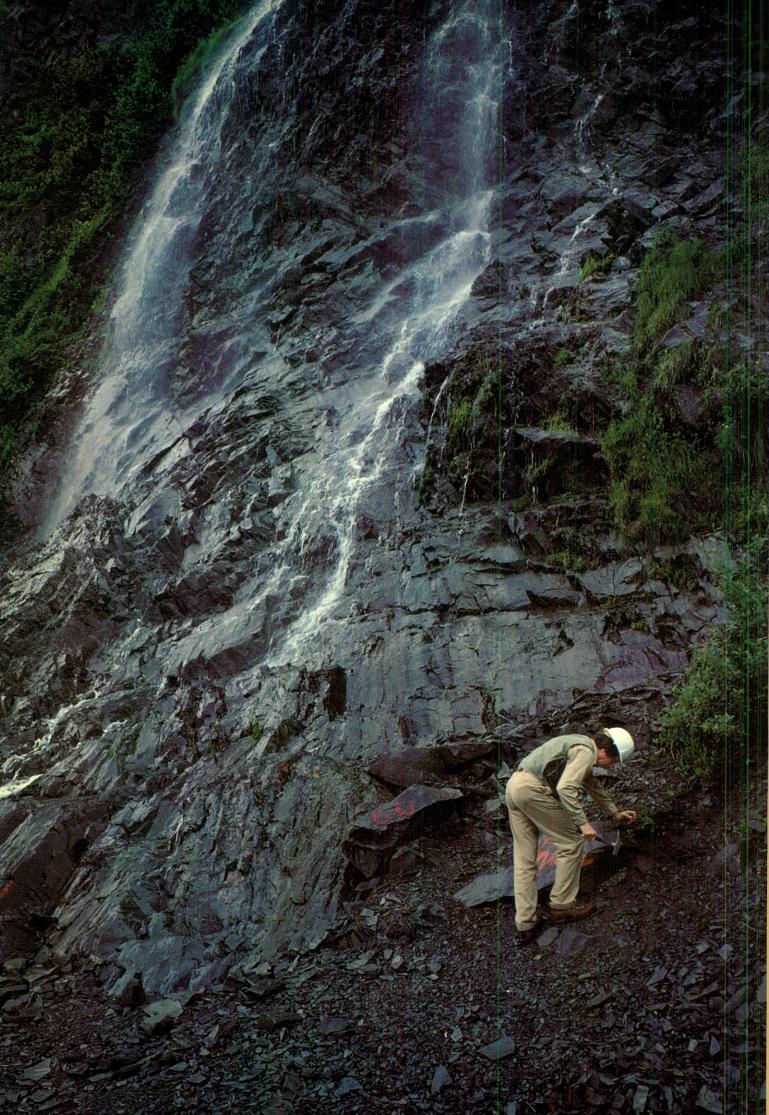
Lornex mill under expansion. The new section now houses additional autogenous grinding and ball mills, flotation cells, control computers and other equipment that will increase the plant's capacity by 68 per cent.



Steel being erected for expansion of mine maintenance building. The addition will enable the facility to handle the expanded erray 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.



Minerals Exploration

Exploration expenditures by Rio Algom and its subsidiaries, including expenditures related to the Sage Creek coal property, were \$10.7 million compared with \$9.1 million in 1979.

The exploration activities of Riocanex, the Canadian exploration arm of Rio Algom, were carried out in Newfoundland, Quebec, Ontario, Manitoba, British Columbia, the Yukon and Northwest Territories. At year-end there were 33 technical personnel based in Riocanex' head office in Toronto, regional offices in Toronto and Vancouver and district offices in St. John's, Newfoundland, Fredericton, N.B., Quebec City, P.O., Thunder Bay, Ontario and Whitehorse, Yukon. Some 117 university students were employed during the summer of 1980. Ten property agreements were made, diamond drilling totalling 88,000 feet was done on 20 properties and three independent exploration organizations were sponsored. Geological and geophysical research projects totalling \$350,000 were sponsored at six Canadian universities and in two Canadian industrial organizations.

A program of trenching and further diamond drilling was carried out in the one-mile long, main

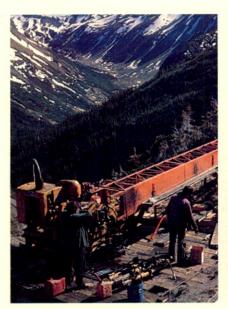
mineralized sector on the Cape Ray gold property in southwestern Newfoundland. Estimated indicated mineralized material on the property is 1,270,000 tons grading 0.2 ounces of gold and 0.5 ounces of silver per ton. A preliminary feasibility study is underway. Riocanex' interest in the property is 90%, subject to a production royalty.

Further diamond drilling was carried out on the molybdenum property in northwestern Ontario held by Pidgeon Molybdenum Mines Limited in which Rio Algom and the Dickenson Mines Group have equities of approximately 60% and 30% respectively. The drilling indicated open-pittable material of 10 million tons grading 0.1% molybdenum. Drilling in 1981 will test preliminary drilling indications of a 5 million ton extension to the west.

A diamond drilling program was carried out on a property in the Nelson area of southern British Columbia by the Aylwin Joint Venture in which Riocanex and BP Canada each have a 50% interest. The drilling encountered copper-gold-silver mineralization and a molybdenum-bearing zone was also identified. Drilling in 1981 will further test the property.

Through subsidiaries of Rio Algom an exploration presence has been established in Australia and

Exploration. A geologist takes a rock sample in the Gaspé peninsula. In Canada, programs were carried out in Newfoundland, Quebec, Ontario, Manitoba, British Columbia, the Yukon and Northwest Territories.



Crew prepares a drill site in northern British Columbia.



Sage Creek coal property in southeastern British Columbia. Efforts to bring it into production are continuing.

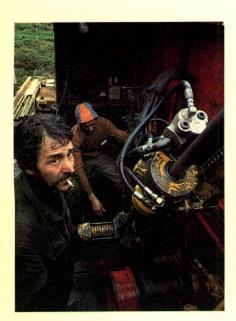
Chile, and in Argentina through a 50-50 joint venture with a major industrial organization. A number of properties are under investigation. Exploration activities will be established in Spain and Portugal in 1981.

Efforts to bring the Sage Creek coal property, in which Rio Algom has a 60% interest, in southeastern British Columbia into production were intensified. Mine planning and environmental studies are well advanced. Marketing efforts were increased to identify customers for long term contracts to support the development of the property for production and to determine the product mix and the level of production which would be most desirable. The recent increase in demand and price for steam coal has been encouraging.

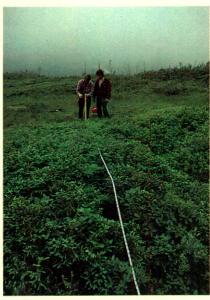
Employee Relations

As at December 31, 1980, Rio Algom and its subsidiaries employed a total of 3,814 persons in mining operations. Of these, 2,925 were production employees; 833 employees were engaged in executive, technical, administrative and clerical capacities and 56 employees were engaged in exploration activities.

Labor contracts relating to mining operations are in effect in the Elliot Lake area for hourly rated employees, office and technical employees and production and maintenance employees and the operating engineers until September 1, 1981; at the Lisbon mine for the production and maintenance employees until February 28, 1982; at the Lornex mine for production, maintenance, office and technical employees until June 30, 1982.



Drilling on the Cape Ray gold prospect in Newfoundland.



A survey grid is set up in preparation for further testing of a property.

Workhorse of modern exploration, a helicopter brings drill gear to an exploration site in the Northwest Territories.



Steel

Total sales, including metal products purchased from others by the Atlas Alloys metal service centre distribution group for resale, amounted to \$447.9 million in 1980 compared to \$362.9 million in the previous year. Operating profits from these operations before interest and taxes were \$49.4 million in 1980 compared to \$31.7 million in 1979.

The sales and operating profit figures for 1980 and 1979 are not fully comparable because, as explained in Rio Algom's accounting policies, the 1979 figures do not include the sales and operating profit of Atlas Alloys Inc., a United States subsidiary of Rio Algom.

Atlas Steels

Marketing and Distribution

Atlas Steels sales activity increased in 1980 primarily due to the resumption of operations at the Tracy plant in January following the nine-month strike in 1979.

During the first half of 1980, demand for Tracy plant stainless flat rolled products was reasonably strong in Canada as sales to distributors and to the buoyant capital goods spending end use markets partially replaced continuing low activity in the automotive end use sector. Offshore market

demand was also strong during the first half of the year. Domestic and offshore demand decreased sharply in the second half of the year as did some prices. The decreases in selling prices were not paralleled by similar reductions in operating costs and product profit margins declined.

At the time when the Tracy plant resumed operations, strong competition was experienced from United States and other offshore stainless flat rolled producers who had established themselves with Canadian customers during the strike. During the year part of the normal share of business with these customers was regained; more traditional market shares are expected during 1981.

Welland plant product sales decreased in 1980 in both the Canadian and United States markets. The principal reason for the reduced sales was lower demand from the automotive end use sector which began in late 1979 and continued through 1980. In addition sales to agricultural and offroad vehicle end use markets, which had been strong in 1979, declined sharply during the first half of 1980. Inventory reduction programs initiated by most major customers also contributed to the decrease in sales. Strong demand from the energy exploration, aerospace and capital goods sectors provided some



Atlas Steels' Welland plant.
New \$4.1 million facility
seen at right, purifies and
recycles plant cooling
water. Steel going up to the
left of main plant is part of
\$11 million expansion of
the cold bar finishing
operation, scheduled for
completion in 1982.



Before and after.
Effectiveness of new water quality control system at the Welland plant is evidenced in these two jars of water. The system each day removes mill scale and lubricants from over 6 million gallons of cooling water which is then recycled.

Sparks fly as billet is scarfed with an oxyacetylene torch as 500 visiting tool and die makers watched at Atlas Steels' Welland plant.



replacement sales during the first half of 1980 but these end use markets also softened during the latter part of the year. While sales to the important automotive sector continued to decline during 1980 the continuing weakness of the Canadian dollar helped to maintain Atlas Steels' competitiveness in the market.

In early 1980 United States import quotas on certain specialty steel grades, which had been imposed in 1979, were lifted. Despite this, a United States recession, coupled with intense price competition by both United States and foreign producers, resulted in a decrease in sales of such products to the United States. The United States government has announced that it will initiate an anti-surge monitoring program on specialty steel imports starting in 1981. It is expected that the antisurge mechanisms will not materially impede Atlas Steels' exports of specialty steel products to the United States in 1981.

The United States trigger price mechanism applicable to imports of low alloy and carbon steel products was also suspended early in 1980. However, in October these products were again afforded protection when the United States government reinstated the trigger price program. The new

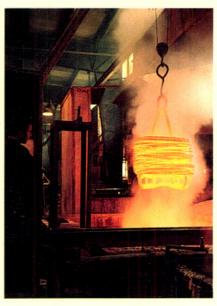
program, however, provides for pre-clearance which will allow applicants to import such products into the United States at less than the applicable trigger prices without an anti-dumping investigation provided that the applicant sells the product at or above fair value. It is expected that low alloy bar products, under trigger price, will qualify for pre-clearance and that 1981 sales of these products to the United States market will not be restricted by this program.

Manufacturing

Welland plant profit was lower than in the previous year, mainly because of a significant decrease in shipments. The weakness in the order backlog which began in late 1979 continued throughout 1980; at year end it was approximately 20% lower than a year earlier and the product mix was weaker. Over the year a number of the main production units operated at about 75% of normal production capability and there were significant reductions in the work force. The costs of utilities continued to escalate but prices of some key raw materials, which had increased significantly in 1979, declined during 1980 because of low demand for them. A high level of productivity and cost effectiveness of the melt



Stainless steel for Lethbridge's gleaming new \$4-million airport terminal building came from Atlas Alloys. Stainless is finding increasing use in the construction field generally.



Coil of stainless steel wire is softened through annealing before further processing at Atlas Alloys' Melbourne plant.
The company provides Australia with its first domestic source of highspeed drill rod and stainless steel wire.

Atlas Alloys is a major supplier of aluminum sheet and plate used in aircraft construction. In the case of the \$5 million de Havilland Dash 7, Atlas Alloys provided alloy frames utilized in the fuselage to absorb landing shock.



shop, brought into production in 1978, strict control over spending and energy conservation were significant offsetting factors and contributed to the achievement of financial results that were satisfactory in the light of lower facility utilization.

As previously announced, a long range plan has been developed for the expansion and modernization of the Welland plant at a cost of more than \$100 million over the next 10 years. This will provide for sales growth and cost reductions which will maintain and improve the competitive position of the plant. The first phase to expand capacity for heat treating and cold bar finishing operations at an estimated cost of \$11.0 million is scheduled for completion in mid-1982. In addition, construction of a water treatment facility at the north plant was completed late in the year, is now in full operation, and the quality of the effluent is well within permissible limits.

Start-up of operations at the Tracy plant in January 1980, after the nine-month strike in 1979, was achieved without any major difficulties. The order backlog was low when operations resumed but the ability to react to opportunities in the market place and aggressive scheduling of deliveries permitted a steady increase in production toward normal levels. As a result, and with the benefit from the consumption of low cost inventories on hand when the strike began, there was a major improvement in Tracy plant profit as compared to the previous year.

At both manufacturing plants accident prevention committees were established many years ago and are active and supportive in reducing occupational accidents. During the year two records were set for continuous periods of operation without a lost time accident. The internal plant occupational environments are regularly monitored under established programs and procedures; the level of contaminants and other designated substances are within permissible limits.

Atlas Alloys

The Atlas Alloys metal service centre distribution group achieved record sales in 1980 and earnings were second only to the record levels of the previous year.

Operations in Canada were conducted during the year from 12 service centres. Sales improved at all locations despite a weak business environment. In eastern Canada there was strong competition for available business mainly because of reduced activity in the manufacturing sector. In western Canada uncertainties related to resource

development had a negative effect on markets in the latter part of the year and have clouded the outlook for 1981 and beyond. Late in 1980 a new facility was opened in Saint John, New Brunswick to serve some of the developing market areas of eastern Canada that were previously served from the Montreal facility.

In the United States total sales were slightly lower in 1980 in spite of increased sales at the Cleveland, Chicago and Rockford, Illinois service centres, the latter having been acquired in late 1979. These positive accomplishments were however, adversely affected by reduced activity in the Detroit operation because of lower demand from the automotive end use sector. Operations are being strengthened by improvements of facilities, product lines and administrative procedures.

Sales and earnings of Australian operations, from five locations, were at record levels. Market shares for principal product lines were improved. Production from the wire drawing facility at Melbourne was at a high level throughout the year.

The Mexican operation had record sales but earnings were somewhat lower than the record level of 1979 due primarily to competitive market conditions. Substantial progress was made in increasing the sales of stainless steel products. Arrangements concluded late in the year for the distribution of aluminum products add to the growth potential of the Mexican operation.

Sales of the United Kingdom operation from its two service centres rose substantially despite depressed market conditions. Because of competitive market conditions profit margins were lower which, coupled with high interest rates, affected earnings adversely.

Employee Relations

At December 31, 1980, Rio Algom and its subsidiaries employed a total of 3,441 persons in Atlas Steels and Atlas Alloys operations. Of these 1,804 were engaged in production, 978 in sales and 659 in executive, administrative and clerical functions.

Labor contracts are in effect at the Welland plant for production and maintenance employees until February 16, 1982 and for office and technical employees until August 31, 1982. At the Tracy plant contracts are in effect for production and maintenance employees until November 30, 1981 and for office and technical employees until January 31, 1982.

Auditors' Report to the Shareholders

Accounting Policies

We have examined the consolidated statements of financial position of Rio Algom Limited as at December 31, 1980 and 1979, and the consolidated statements of earnings, retained earnings, contributed surplus and changes in financial position for each of the three years in the period ended December 31, 1980. 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 consolidated financial statements present fairly the financial position of the corporation as at December 31, 1980 and 1979, and the results of its operations and the changes in its financial position for each of the three years in the period ended December 31, 1980, in accordance with generally accepted accounting principles in Canada applied on a consistent basis.

Coopers & Lybrand Chartered Accountants

Toronto, Canada March 20, 1981. The principal accounting policies followed by Rio Algom Limited and its subsidiaries are summarized hereunder to facilitate a comprehensive review of the consolidated financial statements contained in this report.

Basis of Consolidation

The consolidated financial statements for the years ended December 31, 1980 and 1978 include the accounts of all significant subsidiary corporations.

For the year ended December 31, 1979 the accounts of Rio Algom's United States subsidiaries were not consolidated with those of Rio Algom because of a court injunction obtained by Westinghouse Electric Corporation ("Westinghouse") on January 24, 1979 which restricted the movement of funds out of the United States. The settlement with Westinghouse provides for the dissolution of this injunction and accordingly under generally accepted accounting principles the accounts of Rio Algom's United States subsidiaries have been consolidated with those of Rio Algom for the year ended December 31, 1980 (see note 9). In addition the earnings of the United States subsidiaries for the year ended December 31, 1979, amounting to \$3.5 million, have been included in Rio Algom's consolidated earnings for 1980.

As a result of the foregoing the consolidated financial statements for 1979 are not fully comparable with those of 1980 and 1978.

Translation of Foreign Currency Accounts into Canadian Dollars

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 Corporation charges depreciation and amortization on the following basis:

(i) Mining fixed assets:

Fixed assets are depreciated on the basis of the shorter of physical life or economic life, as estimated for each mining unit; economic life is adjusted from time to time as conditions warrant.

(ii) Steel fixed assets:

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

Buildings 4%Plant and equipment $6^{2}/_{3}^{0}$

4% per annum 6²/₃% per annum

Mining properties and preproduction expenditures are amortized on the same basis as mining fixed assets are depreciated.

Excess of acquisition cost over adjusted book value of Atlas Steels assets is amortized on a straight line basis over a period ending in 1982.

Debenture discount and financing expenses are amortized on the debentures outstanding method over the life of the Sinking Fund Debentures Series B of the Corporation, which mature on July 15, 1995.

Capitalization of Interest

The Corporation follows the policy of capitalizing net interest costs during construction or development only on those projects for which funds have been borrowed; 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 Corporation. All exploration expenses have been written off.

Income and Mining Taxes

The Corporation provides for deferred income and mining 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.

Earnings per Common Share

Earnings per common share are stated after provisions for dividends on preference shares and are based on the weighted average number of shares outstanding during each year; the earnings per common share for 1979 and 1978 have been restated to reflect the amalgamation of Rio Algom Limited and Preston Mines Limited.

Consolidated Statement of Financial Position

(Thousands of dollars)

December 31	1980	1979
Current assets:		(note 2)
Cash and short term deposits	\$ 96,089	\$ 85,030
Receivables and prepaid expenses	109,904	81,359
Inventories and concentrates awaiting shipment (note 3)	237,485	220,229
Total	443,478	386,618
Less:		
Current liabilities:		
Bank loans and overdrafts	7,200	12,270
Accounts payable and accrued liabilities	125,344	89,887
Income and mining taxes	25,716	63,123
Total	158,260	165,280
Working capital	285,218	221,338
Plant and equipment (note 4)	347,236	347,495
Construction in progress, at cost	194,225	47,581
Mining properties and preproduction expenditures (note 5)	66,716	73,071
Excess of acquisition cost over adjusted book value of Atlas Steels assets,		
less amortization	2,087	3,134
Debenture discount and financing expenses, less amortization	551	743
Investment in and advances to affiliated corporation, at cost (note 10(e))	6,966	12,898
Investment in and amounts receivable from United States subsidiary		27,234
corporations (at cost plus equity to December 31, 1978) (note 1)	617,781	512,156
Total assets less assessed liabilities	902,999	733,494
Total assets less current liabilities	902,999	733,434
Deduct:	105 492	02.096
Long term debt (note 6)	105,483 82,741	93,086 28,600
Advances from Ontario Hydro (note 7)	162,266	117,613
Deferred income and mining taxes	55,834	45,614
Minority shareholders' interests in subsidiary corporation	406,324	284,913
Europe of pagets over lightilities	\$496,675	\$448,581
Excess of assets over liabilities	\$490,073	\$440,301
Ownership evidenced by:		
First preference shares (note 8)	\$ 8,704	\$ 8,802
Second preference shares (note 8)	39,997	44,152
Common shares (note 8)	49,179	49,142
Contributed surplus	36,841	36,468
Retained earnings	361,954	310,017
Total	\$496,675	\$448,581

Approved on behalf of the Board:

G. C. Gray, Director R. D. Armstrong, Director

Consolidated Statement of Earnings (Thousands of dollars)

Years ended December 31	1980	1979	1978
Revenue:		(note 2)	(note 2)
Revenue from mine production and sales of steel and other products	\$847,491	\$710,729	\$576,055
Expenses:			
Cost of mine production and steel sales	568,695	433,504	385,158
Selling, general and administration	63,323	47,157	45,476
Interest (net) (note 12)	(7,837)	4,200	2,214
Depreciation and amortization (note 13)	50,983	38,150	32,328
Exploration	10,710	9,063	5,951
	685,874	532,074	471,127
Earnings before taxes and minority interests	161,617	178,655	104,928
Income and mining taxes (note 14):			
Current	18,705	73,137	17,613
Deferred	44,653	11,460	21,095
	63,358	84,597	38,708
Earnings before adjustment for minority interests			
in subsidiary corporation	98,259	94,058	66,220
Minority interests in net earnings of subsidiary corporation	20,771	18,364	4,579
Net earnings for the year (note 11)	\$ 77,488	\$ 75,694	\$ 61,641
Earnings per common share	\$ 5.20	\$ 5.02	\$ 4.03

Consolidated Statement of Retained Earnings

(Thousands of dollars)

Years ended December 31	1980	1979	1978
		(note 2)	(note 2)
Balance, beginning of year (amalgamated)	\$310,017	\$254,192	\$305,732
Adjustment resulting from amalgamation (note 2)			(95,743)*
	310,017	254,192	209,989
Add net earnings for the year	77,488	75,694	61,641
	387,505	329,886	271,630
Deduct:			
Dividends on preference shares	3,547	527	582
Dividends on common shares	21,332	19,342	16,856
Amalgamation expenses (net of tax)	672		_
	25,551	19,869	17,438
Balance, end of year (amalgamated)	\$361,954	\$310,017	\$254,192

^{*}Represents elimination of Preston's share of Rio Algom's retained earnings as at January 1, 1978.

Consolidated Statement of Contributed Surplus

(Thousands of dollars)

Years ended December 31	1980	1979	1978
		(note 2)	(note 2)
Balance, beginning of year (amalgamated)	\$ 36,468	\$36,335	\$44,982
Adjustments resulting from amalgamation (note 2)			(8,798)*
	36,468	36,335	36,184
Profit on purchase of preference shares for cancellation	373	133	151
Balance, end of year (amalgamated)	\$ 36,841	\$36,468	\$36,335

^{*}Represents elimination of Preston's share of Rio Algom's contributed surplus as at January 1, 1978.

Consolidated Statement of Changes in Financial Position (Thousands of dollars)

Years ended December 31	1980	1979	1978
Source of Funds:		(note 2)	(note 2)
Earnings before adjustment for minority interests in subsidiary corporation	\$ 98,259	\$ 94,058	\$ 66,220
Add items included in earnings not involving current outlay of funds:			
Depreciation, amortization and other charges (net)	50,540	38,335	31,655
Deferred income and mining taxes	44,653	11,460	21,095
Funds provided by operations	193,452	143,853	118,970
Advances received from Ontario Hydro	54,141	26,680	1,920
Housing loans and mortgages (net)	15,915	6,599	16,932
Repayment of advances to affiliated corporation	5,932	3,480	(2,274)
Prepaid royalties recovered		1,549	965
Reinstatement of investment in U.S. subsidiaries \$27,234 less plant and equipment \$7,766 (note 1)	19,468	_	
Working capital at January 1, 1979 of U.S. subsidiaries not consolidated (note 1)	_	(17,946)	
	288,908	164,215	136,513
Disposition of Funds:			
Expenditures (net) for plant and equipment, construction in progress, mining properties and preproduction	182,200	120,994	89,295
Dividends on common shares	21,332	19,342	16,856
Dividends on preference shares	3,547	527	582
Payment of Lornex dividends to minority shareholders	10,551	5,275	527
Purchase of preference shares for cancellation	3,880	567	690
Reduction of long term debt:			
Rio Algom Limited debentures	3,518	3,839	872
Bank loans of subsidiary corporation		24,351	23,377
	225,028	174,895	132,199
Increase (decrease) in Working Capital	63,880	(10,680)	4,314
Working Capital, beginning of year	221,338	232,018	227,704
Working Capital, end of year	\$285,218	\$221,338	\$232,018

Notes to Consolidated Financial Statements

December 31, 1980, 1979 and 1978

1. Accounting policies

The information on page 25 presents a summary of the principal accounting policies and is an integral part of these consolidated financial statements.

To comply with current disclosure requirements of the United States Securities and Exchange Commission, earnings and other information have been presented for each of the three years in the period ended December 31, 1980 in the accompanying consolidated financial statements.

2. Amalgamation

On January 30, 1980 the shareholders of Rio Algom Limited and Preston Mines Limited approved an amalgamation agreement between Rio Algom and Preston, dated as of December 17, 1979, which prescribed the terms and conditions under which the two corporations were amalgamated effective at the close of business on January 30, 1980; the amalgamated corporation operates under the name of "Rio Algom Limited" ("Amalco"). Under the amalgamation each outstanding Rio Algom common share not owned by Preston was converted into one common share of the amalgamated corporation (all Rio Algom common shares owned by Preston were cancelled without any repayment of capital thereon), each outstanding Rio Algom \$5.80 cumulative redeemable first preference share, series A was converted into one \$5.80 cumulative redeemable first preference share, Series A of the amalgamated corporation and each outstanding Preston common share was converted into 0.75 of a common share and one 8.5% cumulative redeemable second preference share, series A of the par value of \$5.00, of the amalgamated corporation.

Since the amalgamation is a combination of two corporations under common control it has been accounted for in a manner similar to a pooling of interests. The accompanying consolidated financial statements for 1979 and 1978 have been restated to include the results of operations and financial position of Rio Algom and Preston on a combined basis. The amalgamation was effected by the following transactions:

- (a) Amalco issued 88,016 First Preference Shares to previous Rio Algom first preference shareholders.
- (b) Amalco issued 8,830,499 Second Preference Shares to previous shareholders of Preston common shares.
- (c) Amalco issued 14,220,929 common shares as follows: (i) 7,598,054 shares to previous common shareholders of Rio Algom (other than Preston); and
- (ii) 6,622,875 shares to previous shareholders of Preston common shares.
- (d) All of the Rio Algom common shares held by Preston were cancelled.

The following table gives the net assets brought into the amalgamation by each of the amalgamating corporations as at December 31, 1979 (in thousands of dollars):

	Rio Algom	Preston	Adjust- ments	Total
Total assets at book value	\$859,533	\$231,538	\$(192,297)*	\$898,774
Total liabilities at book value.	367,690	37,705	(816)	404,579
Minority interests at book value.	45,614	_		45,614

^{*}Reflects elimination of Preston's investment in Rio Algom of

Preston was a non-operating corporation and had no revenue or net income for the one month from January 1, 1980 to the effective date of the amalgamation.

3. Inventories and concentrates awaiting shipment

(100 mg) - 100 mg (100 mg)	The state of the s
1980	1979
(in	thousands)
\$ 28,290 87,700	\$ 23,281 84,227
115,990	107,508
121,495	112,721
\$237,485	\$220,229
	(in \$ 28,290 87,700 115,990

4. Plant and equipment

10000000000000000000000000000000000000	1980	1979
	(in	thousands)
Buildings, at cost	\$260,317	\$243,436
Machinery and equipment, at cost	383,432	358,639
	643,749	602,075
Less accumulated depreciation	298,406	256,122
	345,343	345,953
Land, at cost	1,893	1,542
	\$347,236	\$347,495

Plant and equipment includes \$35,871,000 in respect of assets of mines presently idle which have been fully depreciated.

5. Mining properties and preproduction expenditures

	THE RESERVE AND ADDRESS OF THE PARTY OF THE
1980	1979
(ir	thousands)
\$ 9,988	\$ 7,622
8,847	6,678
1,141	944
168,739	155,863
103,164	83,736
65,575	72,127
\$ 66,716	\$ 73,071
	\$ 9,988 8,847 1,141 168,739 103,164 65,575

6. Long term debt

	1980	1979
	(iı	n thousands)
Rio Algom Limited Sinking Fund		
Debentures (a)		
— 63/4% Series A maturing on		
April 1, 1983	\$ 7,680	\$ 8,102
Less portion included in current		
liabilities	680	
	7,000	8,102
— 11½% Series B maturing on		
July 15, 1995	46,999	49,415
Housing loans and mortgages		
payable(b)	52,023	36,017
Less portion included in current		
liabilities	539	448
	51,484	35,569
	\$105,483	\$ 93,086

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

Series A — \$3,000,000 on October 1, 1981 and 1982; and Series B — \$2,500,000 on July 15, 1981 to 1994 inclusive.

The Sinking Fund Debentures are secured under a trust

deed by a first floating charge upon the property and assets, present and future, of the Corporation.

- (b) The housing loans and mortgages payable generally carry interest rates varying from 10% to 18³/₄%.
- (c) After allowing for prepayments, sinking fund and other requirements over the next five years amount to \$1,219,000 in 1981, \$5,807,000 in 1982, \$7,356,000 in 1983, \$3,889,000 in 1984 and \$3,949,000 in 1985.

7. Advances from Ontario Hydro

	1980	1979
	(in	thousands)
Balance owing at December 31	\$ 82,741	\$ 28,600

Under an agreement concluded in January 1978, Ontario Hydro has agreed to make interest-free advances of the funds required to bring the Stanleigh Project into production, and the funds necessary for the working and sustaining capital requirements of the Stanleigh Project. The funds advanced are to be repaid to Ontario Hydro over the delivery period, estimated to begin in mid-1983, in amounts approximately equal to the amortization allowance included in the base price, as defined in the agreement, of uranium delivered. The advances are secured by a non-recourse first charge against the Stanleigh Project assets.

8. Capital Stock

Authorized:

437,040 First Preference Shares of the par value of \$100 each, issuable in series.

24,168,919 Second Preference Shares of the par value of \$5 each, issuable in series.

25,000,000 common shares without par value.

	First	Preference Shares ^(a)	Second	Preference Shares ^(a)		Common Shares
Issued:	Number	Amount	Number	Amount	Number	Amount
Balance, December 31, 1978	95,022 — (7,006)	(000's) \$ 9,502 — (700)	Ξ	(000's) \$ 	13,511,269 5,925 —	(000's) \$99,204 147
Balance, December 31, 1979	88,016 —	8,802 —	Ξ		13,517,194 1,500	99,351 37
Balance, January 30, 1980	88,016	8,802		_	13,518,694	99,388
amalgamation ^(d)		_	9 830 400	- 44.150	(5,920,640)	(6,057)
shares ^(d)	(976)	(98)	8,830,499 (831,081)	44,152 (4,155)	6,622,875	(44,152)
Balance, December 31, 1980	87,040	\$ 8,704	7,999,418	\$39,997	14,220,929	\$49,179

Note 8 continued

- (a) The issued preference shares are comprised as follows: (i) \$5.80 Cumulative Redeemable First Preference Shares Series A (redeemable at premiums ranging from 2% to 1%); and
- (ii) 8.5% Cumulative Redeemable Second Preference Shares Series A (redeemable at premiums ranging from 2.5% to 0.5%).
- (b) 5,925 common shares were issued for \$147,000 cash in 1979 and 1,500 common shares were issued for \$37,000 cash in 1980 under a Stock Option Plan.
- (c) 7,006 First Preference Shares were purchased for cancellation in 1979 and 976 shares were purchased in 1980 at costs of \$568,000 and \$59,000 respectively. The Corporation's obligations for the years 1981 to 1984 inclusive referred to in note 10 (c)(i) below have been fulfilled.
- (d) (i) In order to effect the amalgamation with Preston (see note 2) 8,830,499 Second Preference Shares and 6,622,875 common shares were issued to the Preston common shareholders and 5,920,640 Rio Algom common shares owned by Preston were cancelled.
 (ii) Subsequent to the amalgamation 831,081 Second Preference Shares were purchased for cancellation. The total cost of \$3,821,940 has been applied to satisfy the Corporation's obligation of \$2,207,625 due February 28, 1980 referred to in note 10 (c)(ii) with the balance of \$1,614,315 being applied toward the 1981 requirement.
- (e) During 1980 all outstanding stock options were terminated.
- (f) There are restrictions on the payment of dividends in the provisions attaching to the Preference Shares and the Corporation's trust indentures relating to the Series A and Series B Debentures.

9. Litigation Settlements

In October, 1976, Westinghouse Electric Corporation ("Westinghouse") commenced an action in the United States District Court for the Northern District of Illinois in which 29 defendants were named, including Rio Algom Limited ("Rio Algom") and Rio Algom Corporation ("RAC"), a United States subsidiary of Atlas Alloys Inc., a United States subsidiary of Rio Algom. The complaint filed by Westinghouse alleged illegal combinations and conspiracies among the defendants to restrain both the interstate and foreign commerce of the United States in uranium in violation of the Sherman Antitrust and Wilson Tariff Acts, and sought to recover treble damages and to secure injunctive relief from each of the defendants.

In November, 1977, thirteen companies, including Rio Algom and RAC, were made defendants in three similar actions (later consolidated for pre-trial purposes) brought by Tennessee Valley Authority ("TVA"). In these actions TVA alleged violations of the United States Antitrust Act and the Wilson Tariff Act and sought to recover treble damages and to secure injunctive relief from each of the defendants.

In August, 1979 Rio Algom commenced an action in the Supreme Court of Ontario against TVA for damages for breach of contract based upon TVA's unilateral repudiation of its 1974 contract with Rio Algom providing for the delivery of the equivalent of 17 million pounds of U₃0₈ in concentrates over the period 1979 to 1990. In September, 1979 Rio Algom commenced a further action in the Supreme Court of Ontario against Westinghouse and TVA for damages based upon activities of Westinghouse and TVA in relation to the 1974 contract.

On March 17, 1981 agreements were reached between Westinghouse and a group of companies, including Rio Algom, RAC, and Rio Algom's ultimate parent The Rio Tinto-Zinc Corporation Limited ("RTZ") and RTZ's subsidiary RTZ Services Limited, and between TVA and a group of companies, including Rio Algom, RAC, and RTZ, to settle actions brought by Westinghouse and TVA in the United States. The agreements also provide for the dismissal of the related actions brought in Canada by Rio Algom against TVA and Westinghouse. Before the settlements contemplated by these agreements become final certain judicial and other formal procedures must be completed and approvals obtained from various governments. Rio Algom believes that these requirements should be satisfied shortly and has obtained, where applicable, favourable opinion of independent legal counsel in this regard.

The terms of the settlement with Westinghouse as applicable to Rio Algom include the sale and delivery by Rio Algom to Westinghouse at a firm price, subject to escalation provisions, of 4 million pounds of uranium oxide. Under a separate agreement between RTZ Services Limited and Rio Algom, RTZ Services Limited will contribute to the settlement with Westinghouse by paying Rio Algom an additional firm amount per pound, subject to escalation provisions, in respect of a substantial portion of the 4 million pounds to be delivered by Rio Algom to Westinghouse.

Provision for the foregoing settlements is reflected in Rio Algom's 1980 consolidated financial statements and does not and will not in the future have a material adverse effect on the consolidated financial position or earnings of Rio Algom.

10. Commitments and contingencies

(a) Estimated total cost to complete capital projects as at December 31, 1980 was approximately \$94,158,000 (committed \$30,778,000). These figures do not include the Stanleigh Project for which funds are being provided by interest-free advances from Ontario Hydro and by mortgages for the housing units to the extent practicable.

- (b) The Corporation is committed to total minimum rentals in the amount of \$22,200,000 under operating leases for land and buildings which expire from 1982 to 1999. Commitments are \$1,800,000 per annum for each of the next four years and \$1,600,000 in 1985.
- (c) So long as Preference Shares are outstanding, the Corporation is obligated to set aside each year, on the dates indicated, the following amounts as a retirement fund to be used to purchase or redeem Preference Shares: (i) First Preference Shares \$300,000 on April 1; and
- (ii) Second Preference Shares \$2,207,625 on February 28.
- (d) Most employees are covered by either contributory or non-contributory pension plans. The funds of each of the various pension plans are administered by a corporate trustee or an insurance company. Total pension expense is charged against earnings in the year of payment to the trustee or insurance company and amounted to \$9,688,000 in 1980, \$9,288,000 in 1979 and \$6,972,000 in 1978. A comparison of uninsured accumulated plan benefits and plan net assets as at the respective valuation dates, varying from July 1, 1978 to January 1, 1980, for the Corporation's defined benefit plans is presented below (in thousands of dollars):

Actuarial value of uninsured accumulated plan benefits:

(i) Pension plans:	
Vested	\$59,072
Nonvested	16,771
(ii) Plans for which above information	
has not been segregated at present:	
Vested and nonvested	9,508
Total	\$85,351
Net assets at valuation date available for	

The weighted average assumed rate of return used in determining the above actuarial value of accumulated plan benefits was 5.89% per year.

uninsured benefits

Additional pension benefits are also provided for certain groups of employees through group annuity contracts. Such benefits are fully funded.

The unfunded liability for pension funds at December 31, 1980 is estimated at \$21,866,000. This is presently being funded over a period of 15 years expiring in 1995.

- (e) The shares representing the Corporation's investment in an affiliated corporation have been pledged as security for debt owing by that affiliated corporation.
- (f) The Corporation had the following contingent liabilities as at December 31, 1980:
- (i) A contingent liability to buy back houses and mobile home lots at Lornex' Logan Lake townsite for \$3,418,000 until December 31, 1982; the cost of the buyback declines by 5% per annum thereafter; and

(ii) Mortgage guarantees of \$3,546,000 on new housing also in Logan Lake.

11. The effect of applying United States generally accepted accounting principles

The Corporation's accounting policy for conversion to Canadian dollars of accounts in foreign currencies is in accordance with the United States Financial Accounting Standards Board Statement No. 8 with the exception of its requirement to translate long term debt at year-end exchange rates. Long term debt formerly included bank loans of a subsidiary corporation, Lornex Mining Corporation Ltd., payable in United States dollars, amounting to U.S. \$25,000,000 at December 31, 1978, which had been converted to Canadian dollars at the rate in effect at the time of the borrowing; these loans were repaid in full during 1979. If the United States policy had been followed the Corporation's 1979 earnings would have been increased by \$3,506,000.

In addition, generally accepted accounting principles in the United States require: (1) the restatement of earnings of prior periods to include the results of unconsolidated subsidiaries when a change occurs in the consolidated entity such as set forth under the accounting policy, "Basis of Consolidation"; (2) the recording of investment tax credits as they arise; and (3) amalgamation expenses to be charged to earnings. The effect on consolidated net earnings for the three years ended December 31, 1980 of (1) including the Corporation's United States subsidiaries during each year, (2) including available investment tax credits in earnings (see note 14), (3) charging amalgamation expenses to earnings, and (4) following the United States policy of converting long term debt at year-end rates of exchange is as follows:

	1980	1979	1978
		(in t	housands)
Net earnings for the year, as reported	\$77,488	\$75,694	\$61,641
States subsidiaries Investment tax credits . Amalgamation expenses	(3,520)* 12,600	3,520	-
(net of taxes) Gain on conversion of long term debt at year-end rates of	(672)	_	-
exchange	_	3,506	363
Net earnings for the year (adjusted on a U.S.			
basis)	\$85,896	\$82,720	\$62,004

^{*}Net earnings of the United States subsidiaries for 1980 and 1978 were \$2,693,000 and \$5,541,000 respectively, which have been included in net earnings as reported.

12. Interest (net)

	1980	1979	1978
		(in t	housands)
Interest on demand bank loans Interest on long term	\$ 1,678	\$ 1,006	\$ 1,329
debt	11,111 (329)	11,657 (957)	13,274 (3,861)
income	(20,297)	(7,506)	(8,528)
	\$(7,837)	\$ 4,200	\$ 2,214

13. Depreciation and amortization

	1980	1979	1978
Plant and equipment Mining properties and preproduction	\$40,764	(in t \$31,971	housands) \$27,793
expenditures Excess of acquisition cost over adjusted book value of Atlas Steels	9,172	5,132	3,488
assets acquired	1,047	1,047	1,047
	\$50,983	\$38,150	\$32,328

14. Income taxes

Earnings before taxes and minority interests consisted of:

	1980	1979	1978	
	(in tho			
Canadian	\$149,027	\$172,611	\$ 93,752	
Foreign	12,590	6,044	11,176	
	\$161,617	\$178,655	\$104,928	

The timing differences giving rise to deferred taxes principally relate to depreciation and preproduction expenses and it is not practical to determine these amounts separately. A reconciliation of the weighted

average Canadian income tax rates and the effective rate of income and mining taxes is as follows (different rates of income tax apply to income from mining, manufacturing and other sources):

	1980	1979	1978
Weighted average			
Canadian income			
taxrates	49.2%	49.6%	47.8%
Increase (decrease)			
resulting from:			
Provincial mining			
taxes	9.5	11.1	12.0
Depletion allowances.	(6.3)	(4.2)	(6.7)
Resource allowances	(6.5)	(8.7)	(7.4)
Inventory allowances .	(1.1)	(0.9)	(1.3)
Investment tax credits.	(3.3)	(1.6)	(6.0)
Exemptincome*	(0.8)		_
Amalgamation tax			
adjustment**	(2.0)	-	
Sundry	0.5	2.0	(1.6)
Effective rate of income			
and mining taxes	39.2%	47.3%	36.8%

*Exempt income principally relates to the non-taxable portion of capital gains.

**The amalgamation tax adjustment relates to an unrecorded tax debit of Preston Mines Limited. The debit arose from loss carry forwards and unclaimed tax depreciation in Preston prior to amalgamation. Because of the amalgamation the appropriate part of this adjustment has been recorded in the accounts in 1980.

At December 31, 1980, the Corporation has \$12.6 million of investment tax credit carry forwards which are available for offset against future taxable income. Such carry forwards, if unused, will expire by 1985.

5. Business Segment Data

The operations of the Corporation and its subsidiaries may be grouped into segments. The primary operations of each segment are as follows:

Business Segment	Operations		
Uranium	Underground mining and milling of uranium ore and sale of uranium concentrates.		
Copper-molybdenum	Open pit mining and milling of copper and molybdenum ore and sale of concentrates.		
Steel	Manufacture and/or distribution of stainless steels, machinery and other steels and other metal products.		

As explained in Rio Algom's accounting policies the accounts of Rio Algom's two United States subsidiaries have not been consolidated with those of Rio Algom for the year ended December 31, 1979. Accordingly, most of the figures reported in this Business Segment Data section for 1979 are not fully comparable with those of 1980 and 1978; the uranium and steel segments are both affected in this respect. In addition, the 1979 and 1978 results have

been restated, where applicable, to include the results of Rio Algom and Preston on a combined basis.

Revenue from mine production and sales of steel and other products, by segment, are as follows (all are to unaffiliated customers except 1979 steel sales of \$9.6 million to an unconsolidated United States subsidiary):

	Y	ear Ended D	ecember 31
	1980	1979	1978
		(in	thousands)
Uranium	\$225,855	\$157,206	\$153,074
Copper-molybdenum	173,738	190,572	88,096
Steel	447,898	362,951	334,885
Consolidated	\$847,491	\$710,729	\$576,055

The operating profit of each segment is as follows:

	Y	ear Ended De	ecember 31
	1980	1979	1978
		(note 2)	(note 2)
		(in	thousands)
Uranium	\$ 26,404	\$ 43,265	\$57,022
Copper-molybdenum	96,904	124,296	30,068
Steel	49,387	31,694	32,771
	172,695	199,255	119,861
Deduct:			
Exploration	10,710	9,063	5,951
Corporate expenses	8,205	7,337	6,768
Interest (net)	(7,837)	4,200	2,214
	11,078	20,600	14,933
Earnings before taxes and			
minority interests	\$161,617	\$178,655	\$104,928

Operating profit is revenue less applicable operating expenses. In computing operating profit none of the following items has been deducted: exploration, general corporate expenses, interest expense (net of investment and other income) and minority interests in net earnings of a subsidiary.

During the last three years the following products contributed to consolidated revenue in the percentages shown:

	Year Ended December 31			
	1980	1979	1978	
Uranium	27%	22%	27%	
Copper-molybdenum	20	27	15	
Stainless steels	23	20	27	
Machinery steels	9	12	12	
Other products	21	19	19	
	100%	100%	100%	

Identifiable assets of each segment are as follows:

	Y	ear Ended Do	ecember 31
	1980	1979	1978
		(note 2)	(note 2)
		(in	thousands)
Uranium	\$346,358	\$312,979	\$182,668
Copper-molybdenum	212,146	252,869	162,066
Steel	263,572	237,620	234,456
Segment identifiable assets	822,076	803,468	579,190
assets	239,183	95,306	181,280
Total assets	\$1,061,259	\$898,774	\$760,470

Segment identifiable assets are those assets that are used in the operations of each segment. General corporate assets are principally cash and short term deposits, construction in progress, investment in and advances to an affiliated corporation and, in 1979, investment in and amounts receivable from United States subsidiary corporations.

Depreciation, depletion and amortization expense of each segment is as follows:

	Year Ended December 31			
	1980	1979	1978	
		(in	thousands)	
Uranium	\$ 32,616	\$ 19,529	\$ 13,927	
Copper-molybdenum	9,601	9,278	9,001	
Steel	8,621	9,215	9,307	
Segment depreciation, depletion and				
amortization expense. General corporate	50,838	38,022	32,235	
depreciation	145	128	93	
Total depreciation, depletion and				
amortization expense.	\$ 50,983	\$ 38,150	\$ 32,328	

Net capital expenditures of each segment including capitalized interest are as follows:

	Year Ended December 31		
	1980	1979	1978
		(note 2)	(note 2) thousands)
Uranium ^(a)	\$ 19,530	\$ 69,736	\$ 77,283
Copper-molybdenum(a).	95,814	8,657	4,427
Steel ^(a)	11,829	7,418	4,571
Segment capital expenditures	127,173	85,811	86,281
project ^(a)	54,862	34,914	2,966
General corporate capital expenditures	165	269	48
Total capital expenditures (net)	\$182,200	\$120,994	\$ 89,295

⁽a) Includes expenditures on construction in progress.

Rio Algom's foreign operations are conducted by subsidiaries in four countries (three countries in 1979, excluding the United States of America); domestic divisions make export sales in various parts of the world. Details of foreign and domestic revenue are as follows:

	Y	ear Ended D	ecember 31
	1980	1979	1978
		(in	thousands)
Domestic operations (Canada) ^{(a)(b)} Foreign operations — United States (1978 and 1980 only), Australia, United	\$744,605	\$668,827	\$489,326
Kingdom and Mexico.	102,886	41,902	86,729
Consolidated revenue	\$847,491	\$710,729	\$576,055

(a) Includes export revenue from sales to unaffiliated customers (and in 1979 revenue from sales to a United States subsidiary) of approximately \$327,089,000, \$347,513,000 and \$231,830,000 in 1980, 1979 and 1978 respectively, as follows:

	Y	Year Ended December 31			
	1980	1979	1978		
		(in	thousands)		
Japan	\$108,502	\$ 92,517	\$ 91,708		
States subsidiary)	67,534	86,034	47,016		
United Kingdom	85,719	66,969	57,849		
Other countries	65,334	101,993	35,257		
	\$327,089	\$347,513	\$231,830		

(b) Does not include revenue from inter-company sales to foreign operations of \$7,816,000 in 1980, \$1,262,000 in 1979 and \$19,292,000 in 1978.

Operating profit by domestic and foreign operations is as follows:

	Y	ear Ended D	ecember 31	
	1980	1979	1978	
	(in thousa			
Domestic (Canada)	\$160,021	\$192,386	\$105,690	
Foreign	12,674	6,869	14,171	
Operating profit of				
segments	\$172,695	\$199,255	\$119,861	

Identifiable assets of Rio Algom's foreign operations totalled \$78,073,000, \$25,363,000 and \$60,971,000 at December 31, 1980, 1979 and 1978 respectively.

16. Related Party Transactions

During the year ended December 31, 1980 the Corporation participated in the following transactions with related parties:

- (a) A dividend totalling \$2.9 million was received from an affiliated corporation and is included in investment and other income. That affiliated corporation also repaid the balances of U.S. \$4.4 million in outstanding loans and 1 million South African rands in advances;
- (b) An indirect wholly-owned subsidiary of The Rio Tinto-Zinc Corporation Limited, the beneficial owner of 52.76% of the Corporation's common shares, received a consultative fee of \$300,000 from the Corporation; and (c) The Corporation obtains services from a legal firm in which a non-executive director of the Corporation had been a senior partner during the year. Payments for such services, representing legal fees and disbursements, totalled less than \$100,000.

See note 9 on Litigation Settlements for details concerning an agreement between the Corporation and RTZ Services Limited (a subsidiary of The Rio Tinto-Zinc Corporation Limited).

Quarterly Financial Data

The quarterly revenue, gross profit, net earnings and earnings per share as previously reported in unaudited quarterly reports to shareholders are set forth in the following table (dollars in millions, except per share amounts):

	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter	Year
1980 (a)					
Revenue	\$214.3	\$197.7	\$179.1	\$256.4	\$847.5
Gross Profit	85.4	59.7	53.9	79.8	278.8
Net earnings	28.2	16.0	11.6	21.7	77.5
Earnings per share	1.93	1.06	0.74	1.47	5.20
1979 (b)					
Revenue	\$171.0	\$151.7	\$174.0	\$214.0	\$710.7
Gross profit	58.8	45.0	79.1	94.3	277.2
Net earnings	19.2	7.9	18.7	29.9	75.7
Earnings per share	1.28	0.48	1.24	2.02	5.02

⁽a) In 1980 data for the fourth quarter and the year include adjustments to reflect (1) consolidation of the United States subsidiaries for the year 1980 and inclusion of the 1979 net earnings of those subsidiaries and (2) provision for the settlements of civil litigation (see notes 1 and 9 to the consolidated financial statements respectively).

Market Price Range of Common Shares and Dividends Paid

The following table shows the high and low prices for Rio Algom common shares on The Toronto Stock Exchange:

	1980	1979
First Quarter	\$376/8-256/8	\$40-344/8
Second Quarter	323/8-281/8	372/8-312/8
Third Quarter	393/8-32	37-28
Fourth Quarter	416/8-344/8	322/8-256/8
Dividends paid per share during 19	980 and 1979:	
Dividends paid per share during 19 May 30, 1979	980 and 1979:	75¢
Silvery de Anne Recordina	980 and 1979:	75¢
May 30, 1979	980 and 1979:	77.500

At December 31, 1980 there were approximately 11,500 holders of record of the common shares of the Corporation. In recent years, Rio Algom has paid dividends on a semi-annual basis. The payment of dividends in future years must necessarily be determined by the board of directors of the Corporation in the light of future earnings, financial requirements and other relevant factors. Restrictions on the payment of dividends are contained in the provisions of the Rio Algom First Preference Shares Series A, Rio Algom

Second Preference Shares Series A and the trust indenture dated April 1, 1963, as supplemented, covering the issue of the Corporation's Series A and Series B Sinking Fund Debentures. These documents have been filed at the offices of the Securities & Exchange Commission in Washington, D.C.

All non-residents receiving dividends from Rio Algom are subject at the source to 10% Canadian Non-Resident Withholding Tax if their country of residence has a tax agreement with Canada providing a particular preferential rate of Canadian tax (e.g. U.S.A.) or 20% if their country of residence has no tax agreement with Canada.

⁽b) See note 2 to the consolidated financial statements re restatement of 1979

Notes:

(i) On January 30, 1980 Rio Algom Limited amalgamated with Preston Mines Limited to continue operations as "Rio Algom Limited". The above data for 1971 to 1979 inclusive have been restated to reflect the data of the amalgamated corporation.

Ten Year Review®	1980 ⁽ⁱⁱ⁾	1979 ⁽ⁱⁱ
Earnings (millions of dollars)		
Revenue	\$ 847.5	\$710.7
Investment and other income	20.3	7.5
	867.8	718.2
Cost of mine production and steel sales	568.7	433.5
Selling, general and administration	63.3	47.1
Interest expense (note 2)	12.5	11.7
Depreciation and amortization	51.0	38.1
Exploration	10.7	9.1
	706.2	539.5
Earnings before taxes and minority interests	161.6	178.7
Income and mining taxes	63.3	84.6
	98.3	94.1
Minority interests in net earnings of subsidiaries	20.8	18.4
Net earnings	\$ 77.5	\$ 75.7
Production Data (millions except steel)		
Uranium in concentrate (pounds)	7.9	5.5
Copper in concentrate (pounds)	126.3	134.2
Molybdenum in concentrate (pounds)	4.8	4.4
Steel (thousands of tons)	180	193
Financial Data (millions of dollars except per share data)		
Per share of common stock		
— Net earnings	\$ 5.20	\$ 5.02
— Dividends	1.50	1.50
—Equity	31.50	27.82
Working capital	285.2	221.3
Working capital	285.2 347.2	221.3 347.5
Plant and equipment	347.2	347.5 898.8
Plant and equipment	347.2 1,061.3	347.5 898.8
Plant and equipment Total assets	347.2 1,061.3 7.91%	347.5 898.8 9.34%
Plant and equipment Total assets — Return on average total assets Redeemable preference shares	347.2 1,061.3 7.91% 48.7	347.5 898.8 9.34% 53.0
Plant and equipment Total assets — Return on average total assets Redeemable preference shares Long term debt	347.2 1,061.3 7.91% 48.7 105.5	347.5 898.8 9.34% 53.0 93.1
Plant and equipment Total assets — Return on average total assets Redeemable preference shares Long term debt Advances from Ontario Hydro	347.2 1,061.3 7.91% 48.7 105.5 82.7	347.5 898.8 9.34% 53.0 93.1 28.6
Plant and equipment Total assets — Return on average total assets Redeemable preference shares Long term debt Advances from Ontario Hydro Capital expenditures	347.2 1,061.3 7.91% 48.7 105.5 82.7 182.2	347.5 898.8 9.34% 53.0 93.1 28.6 121.0 395.6
Plant and equipment Total assets — Return on average total assets Redeemable preference shares Long term debt. Advances from Ontario Hydro Capital expenditures Common shareholders' equity	347.2 1,061.3 7.91% 48.7 105.5 82.7 182.2 448.0	347.5 898.8 9.34% 53.0 93.1 28.6 121.0 395.6
Plant and equipment Total assets — Return on average total assets Redeemable preference shares Long term debt. Advances from Ontario Hydro Capital expenditures Common shareholders' equity — Return on average common shareholders' equity	347.2 1,061.3 7.91% 48.7 105.5 82.7 182.2 448.0	347.5 898.8 9.34% 53.0 93.1 28.6 121.0 395.6
Plant and equipment Total assets — Return on average total assets Redeemable preference shares Long term debt . Advances from Ontario Hydro Capital expenditures Common shareholders' equity — Return on average common shareholders' equity Other Data	347.2 1,061.3 7.91% 48.7 105.5 82.7 182.2 448.0 17.53%	347.5 898.8 9.34% 53.0 93.1 28.6 121.0 395.6 19.43%
Plant and equipment Total assets — Return on average total assets Redeemable preference shares Long term debt. Advances from Ontario Hydro Capital expenditures Common shareholders' equity — Return on average common shareholders' equity Other Data Common shares outstanding (millions)	347.2 1,061.3 7.91% 48.7 105.5 82.7 182.2 448.0 17.53%	347.5 898.8 9.34% 53.0 93.1 28.6 121.0 395.6 19.43%
Plant and equipment Total assets — Return on average total assets Redeemable preference shares Long term debt . Advances from Ontario Hydro Capital expenditures Common shareholders' equity — Return on average common shareholders' equity Other Data Common shares outstanding (millions) Number of common shareholders (thousands)	347.2 1,061.3 7.91% 48.7 105.5 82.7 182.2 448.0 17.53%	347.5 898.8 9.34% 53.0 93.1 28.6 121.0 395.6 19.43%

1978	1977	1976	1975	1974	1973	1972	1971
\$576.1	\$486.6	\$401.6	\$367.4	\$390.6	\$314.9	\$196.1	\$168.0
 8.5	10.2	10.9	4.3	5.9	2.7	.9	.8
 584.6	496.8	412.5	371.7	396.5	317.6	197.0	168.8
385.2	332.8	271.6	239.4	219.8	172.5	136.2	122.4
45.5	39.6	36.2	31.8	37.2	30.4	21.8	19.6
10.7	9.4	8.5	8.0	8.9	11.8	4.7	2.3
32.3	25.6	20.7	20.4	21.0	20.9	12.9	10.8
 6.0	6.4	6.8	6.2	5.1	3.1	2.5	2.4
479.7	413.8	343.8	305.8	292.0	238.7	178.1	157.5
104.9	83.0	68.7	65.9	104.5	78.9	18.9	11.3
38.7	37.7	31.9	35.7	50.6	12.4	2.9	1.9
66.2	45.3	36.8	30.2	53.9	66.5	16.0	9.4
4.6	2.6	5.3	.2	9.8	14.3	(.4)	(.4)
\$ 61.6	\$ 42.7	\$ 31.5	\$ 30.0	\$ 44.1	\$ 52.2	\$ 16.4	\$ 9.8
6.0	5.5	5.5	5.8	6.2	6.2	5.4 ⁽ⁱⁱⁱ⁾	4.5
135.4	141.1	145.7	116.8(iii)	144.2	129.8	52.7 ⁽ⁱⁱⁱ⁾	37.3
4.0	3.8	3.8	3.1	4.0	3.5	.6 ⁽ⁱⁱⁱ⁾	_
208	195	161	161	189	182	159	140
					121 21 22		
\$ 4.03	\$ 2.70	\$ 1.91	\$ 1.91	\$ 3.13	\$ 3.77	\$ 0.96	\$ 0.44
1.29	1.08	1.00	1.00	1.00	0.70	0.40	0.40
23.89	20.77	18.80	17.93	16.77	14.33	10.95	10.11
232.0	227.7	261.8	216.1	156.5	134.8	68.6	68.0
249.0	193.8	143.6	151.6	153.4	158.6	167.9	81.6
760.5	684.1	631.3	542.2	474.5	418.7	382.6	330.1
8.53%	6.49%	5.37%	5.90%	9.87%	13.03%	4.60%	3.27%
53.7	54.5	55.7	51.0	51.3	52.0	52.7	53.1
114.7	122.0	134.0	88.5	63.1	104.2	120.5	102.4
1.9	_	_		_	_	_	_
89.3	96.1	61.0	29.5	14.3	9.3	33.2	89.7
339.6	295.2	267.1	254.4	214.1	182.9	139.7	128.9
 18.06%	13.63%	10.39%	11.01%	20.57%	29.85%	12.19%	7.73%
				10.0	12.0	12.0	12.0
14.2	14.2	14.2	14.2	12.8	12.8	12.8	12.8
13.5	14.3	14.9	16.1	16.4	17.0	18.3	20.3
6,658	5,922	5,544	5,144	5,362	5,450	5,302	4,860
\$392/8	\$296/8	\$364/8	\$342/8	\$372/8	\$366/8	\$23	\$225/8
\$246/8	\$225/8	\$26	\$19	\$187/8	\$19	\$15	\$12

⁽ii) As explained in Rio Algom's accounting policies the accounts of the United States subsidiaries are not included in the above data for 1979 and earnings of those subsidiaries amounting to \$3,520,000 for that year have been included in the net earnings for 1980.

⁽iii) (a) The Lornex copper mine and Lisbon (U.S.) uranium mine commenced operations October 1, 1972;
(b) The Anglo-Rouyn copper mine ceased operations Aug. 16, 1972;
(c) The Poirier copper mine ceased operations June 27, 1975.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Financial Condition

Liquidity and Capital Resources

Working capital increased by \$63.9 million during 1980 to \$285.2 million and the current ratio increased to 2.8:1 from 2.3:1. Consolidated cash and short term deposits of \$96.1 million at the end of 1980 increased modestly from levels at the prior year end. The 1980 year end cash position was enhanced by the inclusion in the consolidated accounts of the United States subsidiaries as discussed in note 1 to the consolidated financial statements.

Operating bank credit lines of \$75 million negotiated by Rio Algom in 1979 were utilized regularly during the last half of 1980. However, the maximum amount outstanding at any time did not exceed \$5.4 million. It is currently intended to have these credit lines renewed in 1981 and in addition to establish bank credit facilities for Lornex. Minor bank borrowing arrangements are also utilized by certain foreign subsidiaries.

Capital expenditures during the year totalled \$182.2 million including \$84.7 million for the Lornex expansion and \$54.9 million for the Stanleigh Project. Expenditures for the Lornex expansion were funded from Lornex' cash flow while the Stanleigh Project is being funded wholly by Ontario Hydro and through mortgages on the housing properties related to the Project.

The most significant capital expenditure programs planned for 1981 are the completion of the Lornex expansion and continuation of the Stanleigh Project. Both these programs are progressing on schedule and within budget.

Payments in respect of dividends and preference share and debenture purchases increased to \$42.8 million in 1980 from \$29.5 million in the preceding year. The increase was primarily a result of the extra dividend paid by Lornex in November and dividends and purchases for cancellation of the second preference shares issued on the amalgamation of Rio Algom Limited and Preston Mines Limited on January 30, 1980 as referred to in note 2 to the consolidated financial statements. In addition, in 1979, Lornex bank loans were fully retired by payments of \$24.4 million.

The Corporation's sound financial condition combined with its expected level of internally generated funds, existing bank credit lines and funding

arrangements for the Stanleigh Project are expected to provide sufficient funds to finance capital expenditure, dividend and working capital requirements currently anticipated in 1981.

At year end long-term debt, as a percentage of total shareholders' equity, was 21%, almost the same as one year earlier. This conservative level of debt to equity makes considerable borrowing capacity available to the Corporation which can be used to finance new projects or to take advantage of other potential growth opportunities.

Results of Operations

Summary

The following table summarizes the Corporation's consolidated revenue, operating profit by segment and net earnings for each of the three years in the period ended December 31, 1980 (in millions of dollars):

	1980	1979	1978
Revenue:			
Uranium	\$225.9	\$157.2	\$153.1
Copper-molybdenum	173.7	190.6	88.1
Steel	447.9	362.9	334.9
	\$847.5	\$710.7	\$576.1
Operating profit by segment:			
Uranium	\$ 26.4	\$ 43.3	\$ 57.0
Copper-molybdenum	96.9	124.3	30.1
Steel	49.4	31.7	32.8
	\$172.7	\$199.3	\$119.9
Consolidated net			
earnings	\$ 77.5	\$ 75.7	\$ 61.6

As described in note 1 to the consolidated financial statements the foregoing data for 1979 are not fully comparable with those of 1980 and 1978 in that the accounts of Rio Algom's U.S. subsidiaries were not consolidated with those of Rio Algom for 1979; the uranium and steel segments are both affected in this respect. The following is a summary of the revenue and net earnings of the U.S. subsidiaries for each of the three years in the period ended December 31, 1980:

	1980	1979	1978
Revenue	\$ 49.6	(millions o	of dollars) \$ 39.6
Net earnings	\$ 2.7	\$ 3.5	\$ 5.5

Also as described in note 1 the 1979 net earnings of the U.S. subsidiaries, while not consolidated in 1979, have been included in the consolidated net earnings for 1980; however, this comment does not apply to the 1979 revenue shown above.

Revenue

Between 1978 and 1980 revenue from uranium operations increased by \$72.8 million or 48% with most of the increase occurring between 1979 and 1980. Of the aforementioned increase of \$72.8 million 35% is attributable to increased prices and 65% to higher production. The increase in revenue prices occurred primarily between 1978 and 1979 with 1980 prices realized remaining about equal to those of 1979 in spite of the currently depressed state of uranium markets; terms of certain long-term contracts insulate the Corporation against short-term fluctuations in the uranium market. On the other hand, most of the increase in production took place between 1979 and 1980, primarily as a result of the Panel mine commencing commercial operations in November, 1979. As noted above the 1979 financial results are not fully comparable with those of 1980 and 1978 because of the exclusion of a U.S. subsidiary.

Net revenue from production at the Lornex coppermolybdenum mine increased by \$102.5 million or 116% between 1978 and 1979, almost entirely due to improved prices for molybdenum and copper, including higher foreign exchange gains. Between 1979 and 1980 net revenue declined by 9%, largely due to lower prices realized for molybdenum and reduced copper production. These unfavourable factors were partly offset by higher copper prices and increased production of molybdenum during 1980.

Steel revenue for 1979 is not comparable with either 1980 or 1978 because of (1) a nine-month strike in 1979 at the Tracy plant of Atlas Steels and (2) the exclusion of a U.S. subsidiary for that year as previously noted. Between 1978 and 1980 steel revenue increased by \$113 million or 34%; the major part of the increase resulted from higher selling prices. Sales volumes were higher in the service centre operations of Atlas Alloys and lower in Atlas Steels' manufacturing plants in 1980 than in 1978. The steel operations are closely related to the state of the Canadian economy; that economy weakened during 1980, especially in residential construction and automobile manufacture and no particular improvement is foreseen, at least in the short term.

Segment operating profits

Uranium operating profits declined steadily between 1978 and 1980 with most of the decrease occurring between 1979 and 1980. The latter decrease arose largely in connection with problems during the start-up of the Panel operation at Elliot Lake, and increased amortization charges.

Copper-molybdenum operating profits were more than four times as high in 1979 as they were in 1978, primarily because of the substantial increase in net revenue from mine production referred to above. Between 1979 and 1980 those operating profits declined by \$27.4 million or 22%. In addition to the decrease in net revenue noted above, a major factor was an 18% increase in operating expenses which was largely due to a wage contract settlement in mid-1980 and higher costs for fuel, power, grinding media and mill liners.

Steel operating profits increased by \$16.6 million or 51% between 1978 and 1980; as noted above the 1979 results are not comparable with those of the other two years. In addition to the increased revenue noted above, the increase in 1980 operating profits as compared to 1978 was largely attributable to the high level of efficiency attained at the new melt shop in Welland for both 1980 and 1979. Service centre earnings dropped in 1980 from the record levels attained in 1979, because of lower gross profit margins, but were still significantly higher than in 1978.

Consolidated net earnings

While segment operating profits increased by \$79.4 million or 66% from 1978 to 1979, consolidated net earnings rose by only \$14.1 million (23%) because of increases of \$45.9 million in income and mining taxes, \$13.8 million in minority interests of Lornex, and \$5.6 million in expenditures for exploration, corporate expenses and interest. The large increase in taxes was due to higher pretax earnings and a substantial increase in the effective tax rate caused primarily by a change in the proportions of earnings among operations taxed at different rates.

Conversely, while segment operating profits declined by \$26.6 million between 1979 and 1980, consolidated net earnings rose by \$1.8 million. Interest income (net of interest costs) increased by \$12 million largely due to significantly higher investment income, particularly at Lornex, and to an initial dividend of \$2.9 million received from an affiliated corporation. A decrease of \$17 million in earnings before taxes and minority interests was more than offset by lower effective tax rates (39% in 1980 vs. 47% in 1979) resulting from expansion-related expenditures, principally at Lornex and Elliot Lake and from the amalgamation of Rio Algom Limited and Preston Mines Limited.

Impact of Inflation and Changing Prices

At the uranium mining operations the major impact of inflation during 1980 was on operating costs, particularly labour. To a certain extent those effects were ameliorated by the fact that a significant part of production was for contracts which contain escalation clauses to cover increasing costs.

At Lornex inflation had a minimum effect on revenue in 1980 as realization prices are based on world market prices for copper and molybdenum and those prices by no means kept pace with inflation. In addition operating costs rose more than average inflation rates, partly due to increased labour costs arising from the new wage contract effective from mid-1980.

At Atlas Steels' manufacturing plants inflation had a significant favourable impact on the Tracy plant because the costs of inventories processed in early 1980 were at prestrike levels, well below their 1980 replacement costs. At the Welland plant certain key raw materials which were under price pressure during the year moderated the effects of cost inflation. In Atlas Alloys' service centre operations the impact of selling price increases in 1980 on net sales and net earnings was significantly less than in 1979. Product cost increases were lower in 1980 but competitive pressures made it difficult to fully compensate for those increases with higher selling prices; consequently, gross margins declined during 1980. Further, escalating costs had a more significant effect on expense and salary levels than in previous years. Accordingly, the overall effect of inflation on Atlas Alloys' operations for 1980 was more unfavourable than in the previous year.

Rio Algom Limited

Operations

Canada

Mining

Head Of ice: Toronto, Ontario

Uranium Operations:

Panel, Quirke and Stanleigh mines at Elliot Lake, Ontario

Copper-riolybdenum Operations:

Lornex Nining Corporation Ltd., Vancouver, B.C.

Lornex n ine at Logan Lake, B.C.

Exploration

Rio Tinte Canadian Exploration Limited (Riocanex)

Head Of ice: Toronto, Ontario

Eastern Canada Office: Toronto, Ontario Western Canada Office: Vancouver, B.C. District Offices: Fredericton, St. John's, Quebec (ity, Thunder Bay and Whitehorse

Atlas Steels

Head Office: Welland, Ontario

Plants: Welland, Ontario and Tracy, Quebec

Metals Distribution

Atlas Alloys

Head Office: Etobicoke, Ontario

Service Centres: Etobicoke, Montreal, St. John, Windsor, Sarnia, Sudbury, Thunder Bay, Winnipeg, Saskatoon, Edmonton, Calgary, Vancouver and Prince George

United States

Mining

Rio Algom Corporation

Registered Office: Wilmington, Delaware

Uranium Operations: Lisbon mine at Moab, Utah

Metals Distribution

Atlas Alloys Inc.

Head Office: Valley View, Ohio

Service Centres: Valley View, Ohio; Detroit, Michigan;

Rockford, Illinois; Chicago, Illinois

Overseas

Exploration

Rioaustex Pty. Ltd., North Sydney, Australia Compania Minera Riochilex Ltda., Santiago, Chile Rioargex S.A., Buenos Aires, Argentina

Metals Distribution

Atlas Alloys Limited, Luton, Beds., England Atlas Steels (Australia) Pty. Limited, Melbourne, Australia Aceromex-Atlas S. A., Mexico City, Mexico Agents or Distributors in other countries

Corporate Information

Head Office

120 Adelaide Street West, Toronto, Ontario, Canada M5H 1W5

Coopers & Lybrand, Chartered Accountants, Toronto

Registrars and Transfer Agents

Common Shares

Canada Permanent Trust Company,

Toronto, Montreal, Winnipeg, Regina, Calgary and Vancouver

The Canadian Bank of Commerce Trust Company, New York

First and Second 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

First and Second Preference Shares

Toronto Stock Exchange, Toronto Montreal Stock Exchange, Montreal

Form 10-K **Annual Report**

Rio Algom's Form 10-K annual report for 1980 to the United States Securities and Exchange Commission will be available to shareholders on written request to the Secretary of the Corporation.

Rio Algom Limited

Directors

- G. R. Albino⁽¹⁾⁽³⁾⁽⁴⁾
 President and Chief
 Operating Officer of the
 Corporation, Toronto
- R. D. Armstrong⁽¹⁾⁽³⁾⁽⁴⁾⁽⁶⁾ Chairman and Chief Executive Officer of the Corporation, Toronto
- J. Ian Crookston⁽²⁾⁽⁶⁾
 Financial Consultant,
 Toronto
- J. G. Edison, QC⁽¹⁾⁽²⁾⁽⁴⁾⁽⁶⁾ Counsel to Aird & Berlis, Barristers & Solicitors, Toronto
- A. G. Frame⁽¹⁾⁽⁴⁾
 Joint Deputy Chairman and
 Chief Executive, The Rio
 Tinto-Zinc Corporation
 Limited, London, England⁽⁵⁾
- G. C. Gray(1)(2)(4)
 Chairman and Chief
 Executive Officer, A. E.
 LePage Limited, Realtors,
 Toronto

- R. S. Hurlbut⁽²⁾⁽³⁾
 Chairman and President,
 General Foods Limited,
 manufacturer of packaged
 grocery products, Toronto
- D. S. R. Leighton⁽³⁾
 Director, The Banff Centre
 for Continuing Education,
 Banff, Alberta
- W. Moodie⁽²⁾⁽⁴⁾
 Consultant, Sutton West,
 Ontario
- Sir Anthony Tuke Chairman, The Rio Tinto-Zinc Corporation Limited, London, England⁽⁵⁾
- R. J. Turner⁽¹⁾⁽³⁾
 President and Chief
 Executive Officer, Genstar
 Limited, a diversified
 Canadian company,
 Montreal
- 1. Member of the Executive Committee.
- 2. Member of the Audit Committee.
- Member of the Compensation Committee.
- Member of the Nominating Committee.
- The parent of an international group of mining and industrial companies.
- 6. Retiring from the Board.

Officers

Executive

R. D. Armstrong Chairman and Chief Executive Officer

G. R. Albino
President and Chief
Operating Officer

Corporate

S. B. Kerr Senior Vice-President, Finance

R. G. Connochie Vice-President and Executive Assistant to the President

J. G. Littlejohn
Vice-President, General
Counsel

A. F. Lowell Vice-President, Minerals Marketing

H. A. Pakrul Vice-President

A. C. Turner Vice-President, Secretary

J. Van Netten Vice-President, Treasurer

J. D. French Controller

Mining

P. A. Carloss Vice-President, General Manager, Elliot Lake

P. M. Kavanagh Vice-President, Exploration

J. E. Moyle Vice-President, Mining Engineering

Atlas Steels A. V. Orr Vice-President, General Manager

H. L. Brien Vice-President, Engineering

G. N. Feucht Vice-President, Manufacturing

C. E. Ohlson Vice-President, Sales and Marketing

G. L. Sandler Vice-President, Finance

Atlas Alloys W. D. Dobbin Vice-President, General Manager

K. Collyer Vice-President, Canadian Operations

J. B. Dunn Vice-President, Controller

W. I. Pollock Vice-President, Marketing

