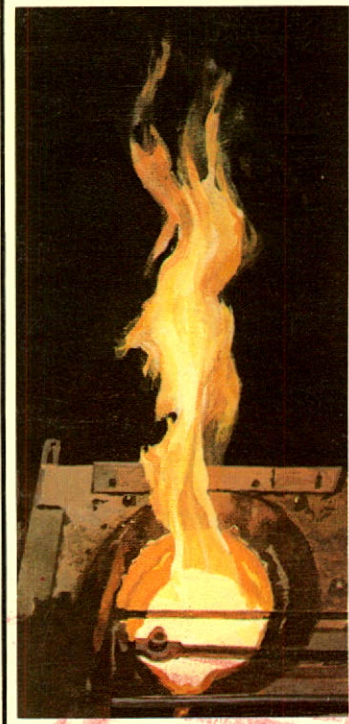
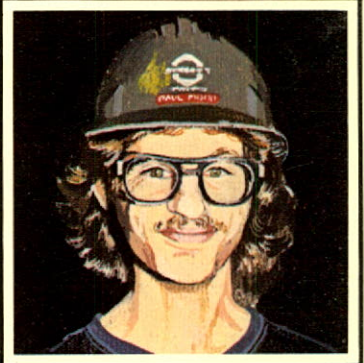


# sherritt Gordon Mines Ltd.



APR 6 1981  
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annual report 1980



# sherritt

Sherritt Gordon Mines Limited



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## 1980 at a glance

	1980	1979
(figures in thousands, except per-share figures and employees)		
Earnings before unusual item	\$ 28,089	\$ 40,966
Net earnings	\$ 24,793	\$ 40,966
Earnings per share		
Before unusual item	\$ 2.19	\$ 3.20
Net earnings	\$ 1.93	\$ 3.20
Dividends per share	\$ 0.80	\$ 1.20
Working capital	\$ 37,969	\$ 92,895
Capital expenditures	\$ 31,080	\$ 16,115
Revenue		
Metal sales	\$288,286	\$245,020
Fertilizer and chemical sales	66,690	55,328
Technology licensing, interest and other income	4,912	4,226
Total revenue	\$359,888	\$304,574
Copper sales (lb.)	80,959	74,968
Zinc sales (lb.)	41,473	56,518
Gold sales (oz.)	21	17
Silver sales (oz.)	499	406
Nickel sales (lb.)	31,177	25,491
Cobalt sales (lb.)	432	583
Fabricated metal product sales (lb.)	6,880	7,410
Fertilizer sales (tons)	471	440
Employees	2,328	2,277

## annual meeting

Thursday, April 23, 1981, at 2:30 p.m.  
Commerce Hall, Commerce Court  
Toronto

# report of the directors

Last year I began the report of the directors by telling you that 1979 was the most profitable year in Sherritt's history. We can't match that piece of good news this year, but I can tell you that 1980 was momentous in a different way. I can also tell you we are confident that the major decisions we took during 1980 will lead to stronger future profits.

Our most important decision was to approve the construction of a world-scale nitrogen fertilizer complex at Fort Saskatchewan, Alberta, at an estimated cost of \$320,000,000, including interest during construction. This will be Sherritt's most ambitious and challenging project since we developed the Lynn Lake nickel mine and built a nickel refinery based on our own hydrometallurgical process in the early 1950s.

Our earnings for 1980 were \$28,089,000 (\$2.19 per share), an 18.6% return on shareholders' equity and a 13.8% return on invested capital. However, a foreign exchange loss on the redemption of outstanding income debentures during the second quarter reduced our net earnings to \$24,793,000 (\$1.93 per share).

Our total revenue was a record \$359,888,000, 18% higher than the 1979 figure. This reflected higher sales prices and increased sales volumes for most of our products. The only exceptions were lower cobalt prices and reduced sales volumes for zinc, cobalt, and fabricated metals.

Our net earnings for 1980 (before unusual item) were about 70% of the record \$3.20 per share established in 1979.

Profits increased only in the fertilizer operations. Fertilizer sales volumes and prices both grew enough to offset the increase in production costs, including the controversial 30¢ natural gas tax imposed by the federal government on November 1, 1980.

It was a disappointing year for the mining division, with after-tax profits falling to 8% of invested capital. Underground production at Ruttan and development at Fox both fell behind schedule during the year.

Our nickel and cobalt refineries performed satisfactorily, but operating profit was lower because we had exhausted our supply of low-cost cobalt feed material in 1979 and because prices declined significantly during the year.

Profits from fabricated metals declined because of reduced sales volumes and a less profitable mix of products.

A major reason for lower net profits was an increase of \$7,551,000 in resource exploration operating costs. Sherritt has traditionally followed conservative accounting practices. For oil and gas exploration, we are using the successful efforts method, rather than the full cost method; this has resulted in a charge to earnings of \$5,304,000 in 1980, mainly because of the unsuccessful deep-drilling program with Forest Oil.

For mineral exploration, we write off all costs until such time as an economic occurrence is identified. In 1980 we wrote off all our expenditures on the

Agassiz gold property and the Cargill phosphate deposit, totalling \$2,256,000, although both deposits have real potential for developing into producing properties.

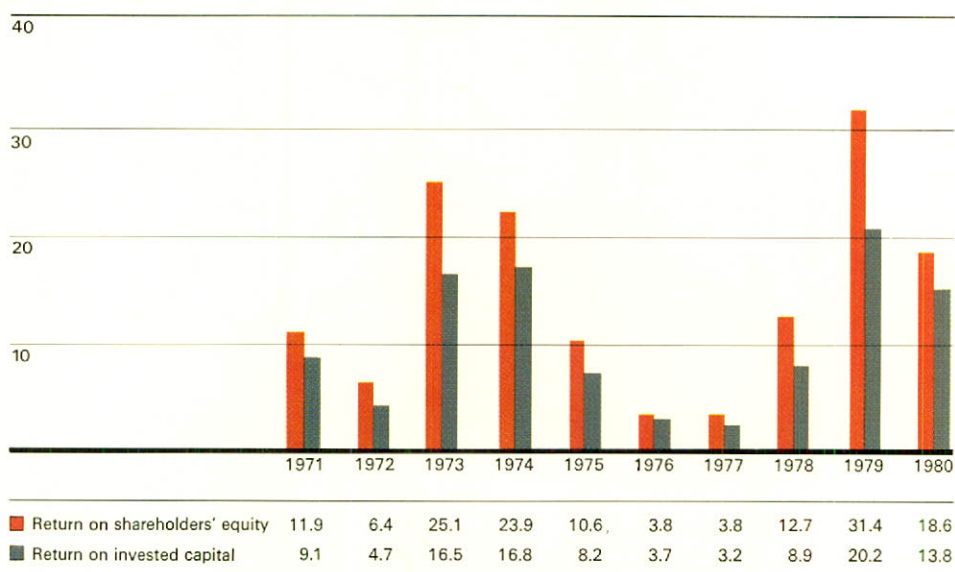
During the year we paid dividends of \$10,257,000 (80¢ per share), in the form of semi-annual payments of 40¢ per share. The directors did not feel this year's earnings warranted an extra dividend.

Capital expenditures in 1980 were the highest since 1972, exceeding \$30,000,000. Our largest outlays were for the beginning stages of deep underground development at Ruttan and for initial costs on the new fertilizer plants.

Looking forward to 1981, we know our capital expenditures will be far greater than in 1980. Exploration and development of the deeper ore zones at both Ruttan and Fox will continue, and we are faced with some heavy outlays for environmental measures at Fort Saskatchewan. Expenditures on construction of the new fertilizer plants could approach \$100,000,000 in 1981.

To cover the financing of the fertilizer project, we have signed an agreement with the Canadian Imperial Bank of Commerce and the Toronto-Dominion Bank for a long-term loan of \$260,000,000 and an operating line of credit of \$40,000,000, limited to 75% of the project cost. This is over and above the existing operating line of credit of \$75,000,000 on our present business. After plant start-up, security for the long-term, floating-rate loan will be the project itself, plus the cash flow from our existing nitrogen operations. There

## Return on Shareholders' Equity and Invested Capital (percentages)



is considerable flexibility in the repayment arrangements, which are scheduled over a ten-year period, 1983 to 1992.

We also have an option to require the CIBC to purchase \$62,500,000 in redeemable preferred shares in 1983. At a special general meeting on January 9, 1981, our shareholders approved an increase in the authorized capital of the company. We are studying alternative ways of issuing additional stock to strengthen the financial position of the company and improve our debt-equity ratio.

The 1981 outlook for the six metals that Sherritt mines or refines is uncertain. Double-digit inflation and high interest costs have shaken the economies of the western world. In Canada, these problems have been magnified by the continuing constitutional debate and the unrest created by the ill-conceived National Energy Program.

In our view, the proposed National Energy Program is discriminatory and, if implemented, will have a serious and negative effect on the investment climate in Canada. We are particularly disturbed about the potentially massive government intervention in the private sector.

These negative thoughts on Canada's economy lead us to predict continued weakness in the Canadian dollar. Of course, this would have benefits for Sherritt, as most of our revenue either comes from export sales or is related to world prices based on the U.S. dollar or the British pound.

However, in any look at our future, there is one overriding factor to consider. The current prices for our three major metals—copper, nickel and zinc—have not kept pace with increased operating costs, let alone the inflated costs of developing new mines. For example, because of the high cost of oil, laterite nickel plants around the world are fighting for survival at today's nickel prices. Even if consumption of these metals remains reasonably static, prices must increase enough to at least offset the inflationary pressure on operating costs. Otherwise, new mines will not be developed and marginal existing mines will close.

This consideration is a major factor in shaping our strategy for the future. We



are exploring for metals near our existing operations, to minimize the capital costs of bringing new properties into production. We are especially seeking and considering development of gold and silver properties, as precious metal prices have represented an inflation hedge. We are developing new fabricated metal products that will increase our profit potential from that area of operations. We are studying further expansion of both our nickel and cobalt refineries, as custom refining has proven a successful business for Sherritt. We are expanding our fertilizer operations because markets and prices seem sure to continue to improve with the growing demand for food to nourish the world's expanding population.

In adopting these strategies we are convinced we are following a prudent course that will maximize Sherritt's potential in this difficult decade.

As a company we have become more involved with the concerns of the mining industry as a whole. In May 1980 I was elected president of the Mining Association of Canada. I consider this both a personal honour and an acknowledgement of Sherritt's role within the industry. I am working with the representatives of other companies to keep the Canadian public and governments better informed about the important contributions of the mining industry to our national wellbeing. This work is both stimulating and challenging.

Before closing I want to express the appreciation of the board of directors for the fine contribution of two valued Sherritt employees who retired during 1980.

Alan E. Gallie, usually known as Doc, gave 42 years of service to the company. His early years were spent in the mining division, and he later travelled the world selling Sherritt's nickel, as vice-president of marketing. His unflagging enthusiasm and good nature have endeared him to everyone.

James A. MacLellan retired as general manager of Manitoba operations after 27 years of faithful service to our mining division. No one has been more popular than Jim, and no one has done more to enhance the reputation of our company in Manitoba and in the Canadian mining industry.

On this page and elsewhere in the annual report are portraits of a few of Sherritt's employees, who were chosen at random to represent our workforce of more than 2300 people. On behalf of the directors, I thank all our employees for their contributions to the company's operations.

On behalf of the Board of Directors.

David D. Thomas  
Toronto, Ontario  
February 10, 1981

# sherritt- a growing company

If organic growth is a sign of health—and we think it is—Sherritt is a very healthy company. Fifty-four years ago, Sherritt began as a small copper producer in mid-Manitoba. Today the company is a diversified organization, the 128th largest corporation in Canada in terms of assets, according to the *Financial Post* survey of the top 500 Canadian companies. And we should at least double our assets—and more than double our sales—during the 1980s.

There has never been a more appropriate time to talk about Sherritt's strategies for expansion. In 1980, our board of directors gave final approval for an expansionary move that is one of the largest in our company's history.

During the past decade the focus of Sherritt's growth has been the mining division. We opened Fox Mine in 1970 and the open pit at Ruttan Mine in 1973. Although our nickel mine at Lynn Lake ran out of ore and had to be closed in 1976, copper and zinc production from the new mines has more than compensated. With the rising prices of precious metals over the past few years, the gold and silver values in our ores have contributed significantly to the earnings of our mining division.

In recent years our largest capital program has been the development of the underground orebody at Ruttan. Now the pit has been closed and Ruttan has become an underground operation. Known ore reserves are large enough to assure continued vitality for years to come.

There have also been several expansionary moves at Fort Saskatchewan during the last decade. Refining, fabricated metals, and fertilizer operations have all enjoyed the benefits of

new and improved facilities. Our accomplishments in technology have kept the company in the forefront of metallurgical innovation and have contributed strongly to our diversification.

Our major thrust for expansion in the immediate future will be at Fort Saskatchewan, although there is certainly no lack of planned development within our mining division.

The most significant expansion—in terms of size, cost, and expected impact on our company's growth—will of course be in our production of fertilizers.

By early 1983, we will have new plants at Fort Saskatchewan capable of producing an additional 1100 tons per day of ammonia and 1000 tons per day of urea, more than double our present fertilizer output.

Fertilizers have become a significant contributor to our profit picture, but for the last few years our share of the market has been falling because we have not had enough product to sell.

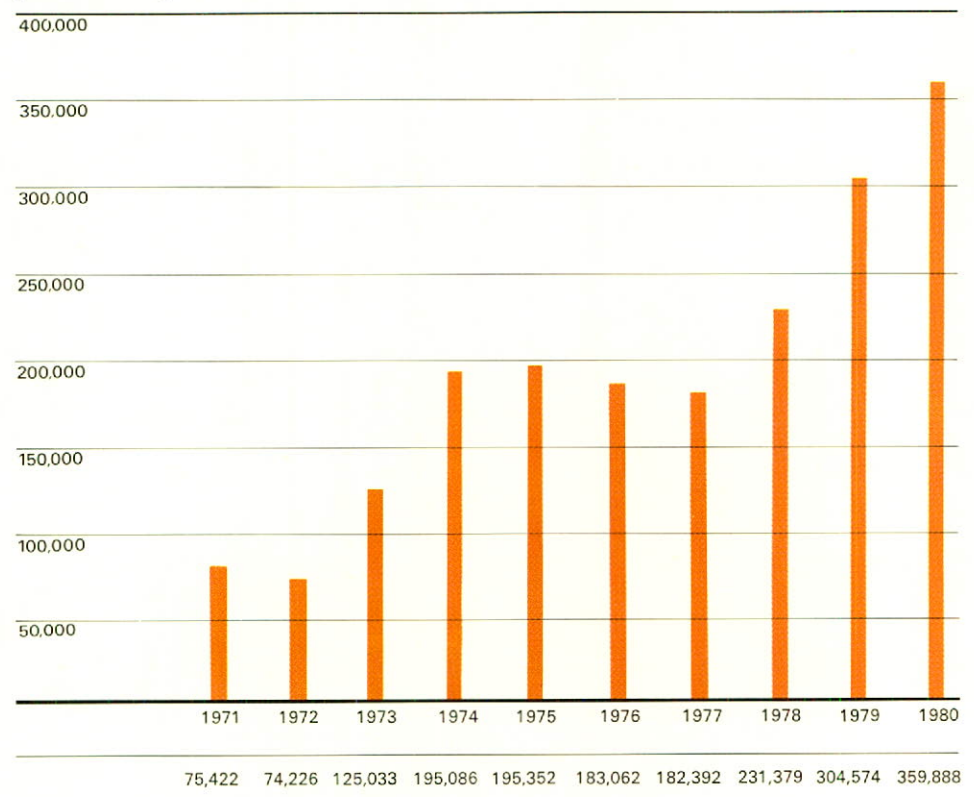
We have a solid marketing structure and dealership network in place, and all

projections indicate that the market for fertilizers in western Canada and in other areas will continue to grow. Although it is reasonable to expect some fluctuation in markets depending on the economic climate, food production is clearly a top priority everywhere, and effective use of fertilizers can increase crop yields substantially.

In some ways we might have preferred to expand our fertilizer operations on a more modest scale. However, our feasibility studies indicated that a world-scale expansion would be the most economical and efficient in the long run. There are major advantages in our existing site at Fort Saskatchewan, where an abundant supply of natural gas is available. We have been able to arrange long-term gas contracts on favourable terms, and our new plants will use the latest, energy-efficient technology. Our major long-term market is western Canada, but initially we plan to sell some of our product outside the country.

In short, our directors concluded that going ahead with this major

**Total Revenue**  
(\$ thousands)





All company offices have high-speed telephone access to Sherritt's new computer centre at Fort Saskatchewan. With this centralized data-processing facility, duplication of effort is eliminated, monthly reporting is accelerated and refined, and demanding projects such as mine planning can be tackled efficiently.

expansion of our fertilizer facilities would be a wise move. We are confident that over the long term this decision will be profitable for our company and our shareholders.

Another significant area of expansion is in our coinage activities. Nickel-Bonded-Steel, the new coinage material developed in our Research Centre in the early 1970s, has enjoyed strong market acceptance and demand now exceeds our production capacity. Nickel is becoming too expensive for use in low-value coins, so we anticipate increasing interest in N-B-S<sup>™</sup> coins, which look and feel like pure nickel but cost much less.

In the summer of 1980, we began construction of a new \$7,000,000 N-B-S plant at Fort Saskatchewan. The plant, scheduled for completion in the summer of 1981, will have a capacity of 1560 tonnes of coinage blanks per year, enabling us to meet the growing market demand. Several national mints and companies are interested in licensing our process for their own production.

We are planning to introduce new fabricated metal products and are well

advanced in the development of a new wear-resistant material for use on heavy equipment.

Our cobalt refinery at Fort Saskatchewan has been expanded again, to offer increased North American-sourced cobalt metal. The latest expansion, which brings our capacity to 1,800,000 pounds per year, was accomplished by our own employees without the use of an outside contractor. We are considering further expansion of our cobalt plant and increased production of nickel as well, in the not-too-distant future.

The expansionary trend is also apparent in our mining activities. We have taken a more aggressive approach to mineral exploration and have increased the budget allotment for this field of endeavour. To date we have had some promising results, encouraging us to

continue in this direction in 1981.

At the Agassiz property near Lynn Lake, Manitoba—which we optioned late in 1979—extensive drilling has confirmed a gold deposit large enough to consider for exploitation, given current gold prices and the existence of our mothballed mill in Lynn Lake. Before the end of 1980 the board approved expenditure of \$4,300,000 for further exploration and development of this property. We are currently in negotiation with a possible joint-venture partner in this project.

We are holding additional gold prospects in the Kenora-Dryden and Red Lake areas of northern Ontario and in central Nova Scotia. We plan to explore these properties more fully during the coming year.

We are seriously examining the possibilities of developing the Cargill phosphate deposit near Kapuskasing, Ontario, which we hold under option. At present, no phosphate rock is mined in Canada and this property appears to have the potential for supplying as much as 20% of the country's requirements. Canada's supply is now imported from the U.S., so development of the Cargill deposit would have a positive effect on our country's foreign exchange position and could have a significant impact on both our mining and fertilizer operations. We could market the phosphate as rock or, alternatively, process it to the phosphoric acid stage.

Our ventures into oil and gas exploration, begun in 1979, have met with limited success up to now. However, because of our increasingly high requirements for natural gas at Fort Saskatchewan, we consider our involvement in this activity to be both prudent and potentially valuable to the company.

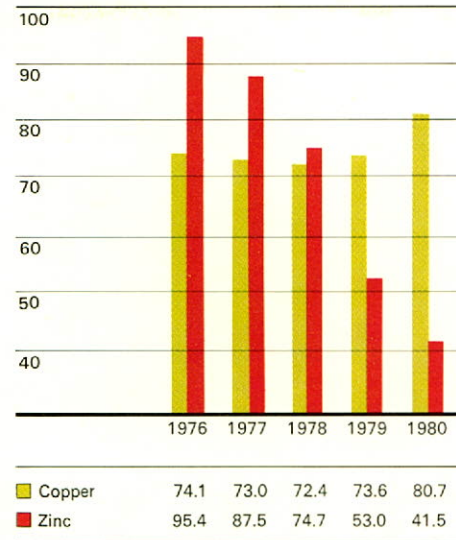
With all of these new projects in progress or under study, Sherritt's outlook for the 1980s is promising. Because our sources of revenues and profits are varied, we will have some protection from the cyclic downturns in specific areas of our business.

Clearly, an aggressive management stance and imaginative financing arrangements will be essential to support Sherritt's continued growth as a Canadian resource company. We are confident that our shareholders will profit from our decision to move forward with optimism.

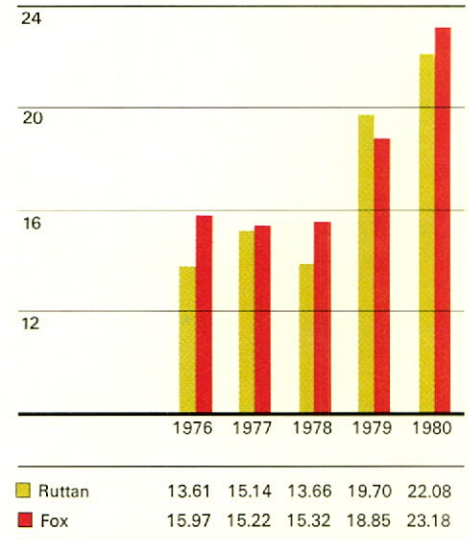




## Concentrate Production in Payable Pounds (figures in millions)



## Cash Production Cost (\$ per ton milled)



## Operations

At the end of the day shift on December 4, 1980, the last truckload of ore from the Ruttan Mine's open pit was discharged into the primary crusher. Production from the pit extended for a longer period than we had expected, and tonnage during the last year was much above forecast, at 1,900,000 tons. This was achieved through selective mining outside the design limits and extension of the planned bottom depth by an extra 40-foot bench.

Activity at the pit bottom is now confined to drilling at the west crown pillar, with the broken ore being transported to the surface crushing plant through the underground haulage and conveying system.

Underground production at Ruttan was well below target, at 877,000 tons, although there was slow, steady improvement during the second half of the year. The major reason for the shortfall was a serious shortage of skilled tradesmen and experienced miners. Towards year end, we contracted out a portion of the maintenance load and reassigned available maintenance personnel from the pit to the underground operations. We also recruited a number of tradesmen from the U.K. to join our workforce early in 1981.

Combined tonnage from the pit and the underground allowed the mill to meet its forecast target of 2,500,000 tons treated. At year end we had

developed a stockpile of more than 200,000 tons of broken ore on surface; this will augment mine output in 1981 to maintain a planned milling rate of 40,000 tons per week.

Recoveries were below projection because of a shortage of higher grade material from underground, but the overall mill performance was satisfactory.

Late in 1979 we brought in a mine development contractor to offset our shortage of skilled personnel. With this assistance we completed about 5½ miles of development during 1980. By October we had recruited enough experienced miners to meet our ongoing requirements.

In July we completed the deepening of our service shaft to the 2290 level; by year end we had established shaft stations and installations at the 1800 and 2200 levels. Early in 1981 we will

be ready to begin definition drilling between the 1400 and 3000 levels. Preliminary planning of a production shaft is proceeding in parallel with the development and drilling program.

A new 25-unit mobile-home park and two 12-suite apartment buildings were constructed in Leaf Rapids during 1980. We expect that this increase in available housing will have a positive effect on the stabilization of our workforce.

At Fox Mine, production was close to forecast tonnage for the first nine months of the year, although both copper and zinc grades were well below forecast. As production increased from the high-grade stopes at and below the 2000 level during this period, metal content improved steadily.

However, both tonnage and grade dropped seriously during the fourth quarter because of an overall shortage

## Production

	1980	1979
<b>Ruttan Mine</b>		
Ore milled (tons)	2,548,000	2,308,000
% copper	1.36	1.39
% zinc	1.02	1.17
Copper contained in concentrate (lb.)	62,293,000	57,678,000
Zinc contained in concentrate (lb.)	30,378,000	37,320,000
<b>Fox Mine</b>		
Ore milled (tons)	864,000	852,000
% copper	1.40	1.19
% zinc	1.56	1.82
Copper contained in concentrate (lb.)	21,458,000	18,108,000
Zinc contained in concentrate (lb.)	18,152,000	23,097,000

In one of Sherritt's mines in northern Manitoba, a miner loads dynamite into holes drilled in the rock face. The blast will advance the opening about ten feet.

of production stopes and, particularly, because of a rescheduling of our 2400-level stope operations.

As a result, although the Fox mill throughput in 1980 was higher than in 1979, it was well below forecast at 864,000 tons. Copper grade was considerably higher than in 1979.

During 1980 we deepened the decline haulageway to the 2600 level and we are now developing access to the west lens zone at that elevation. We will then determine the downdip extension of the Fox orebody by diamond drilling.

We commissioned our second electrically powered load-haul-dump unit during the year and converted one unit to a trolley operation to test the concept before deciding to buy a trolley-powered truck. We have found that the electrically powered vehicles give improved efficiency and lower operating costs, as well as a healthier and more comfortable working environment. By the end of 1981, the west lens produc-

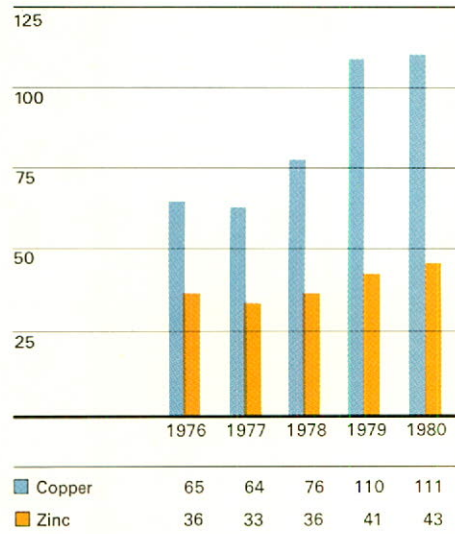
tion area will be completely serviced by electric ore-loading and haulage equipment.

Although copper grade has been lower than forecast, production of precious metals has increased approximately 50% over 1979. Improvements have been greatest in ore from the west lens and the upper levels of the main ore zone. In a program to analyze techniques and methods for improving gold and silver recoveries, Fox metallurgists are receiving assistance from our research group at Fort Saskatchewan and an outside consultant.

We are continuing surface exploration drilling to the south and west of our main ore zone, in an effort to determine whether there is additional mineable ore associated with the known sulphide zones. At year end we began an induced polarization study of this area.

Operating profit from the mining division decreased from \$18,956,000 in 1979 to \$14,317,000 in 1980, a decline

### Average Price Received Copper and Zinc (¢ per lb.)



### Ore Reserves

(tonnage figures in thousands)

	1980			1979		
	Tons	% Copper	% Zinc	Tons	% Copper	% Zinc
<b>Ruttan Mine (undiluted)</b>						
Open Pit	—	—	—	911	1.57	1.24
Underground						
to 1400 level	15,747	1.64	1.23	16,844	1.70	1.22
1400 to 2000 level	9,290	1.82	1.09	9,290	1.82	1.09
Total underground	25,037	1.71	1.18	26,134	1.74	1.17
Total ore reserves	25,037	1.71	1.18	27,045	1.74	1.18
<b>Fox Mine (undiluted)</b>						
Underground						
to 3000 level	5,411	1.78	2.29	5,917	1.77	2.21

### Mining Division Sales Revenue

(figures in thousands)

	1980		1979	
Copper	80,698 lb.	\$ 89,414	73,645 lb.	\$ 80,799
Zinc	41,473 lb.	17,832	56,518 lb.	23,388
Precious metals				
Gold	21 oz.	15,309	17 oz.	7,669
Silver	499 oz.	10,530	406 oz.	7,723
		25,839		15,392
<b>Total</b>		<b>\$133,085</b>		<b>\$119,579</b>

of 25%. Additional production of copper and precious metals and higher prices for all metals, especially gold, contributed to an improvement in revenue. However, higher production costs at both mines more than offset the increased revenue.

### Markets

A protracted strike in the U.S. prevented a large oversupply of copper in 1980. Approximately 300,000 tonnes of lost production was attributable to the strike, and total free-world inventory was almost unchanged from year end 1979 to year end 1980. With the resulting balance of supply and demand in 1980, the average price for LME wirebar copper was 99¢ U.S. There was a very wide swing in prices over the year, with a high of \$1.44 U.S. in February and a low of 79¢ U.S. in December. At year end, the price was depressed to 85¢ U.S.

Sherritt's average realized price for copper during the year was \$1.11 Can., compared with \$1.10 in 1979, but sales volume was 10% greater than in 1979. Copper sales accounted for 25% of the

company's revenue during 1980, slightly lower than the 26% share in 1979.

Zinc refiners in the non-communist world operated at lower levels throughout 1980, primarily because of a reduction in mine output. Economic conditions caused a drop in consumption from 1979 levels, and free-world stocks of zinc were relatively stable. A continuing shortage of mine production in 1981 should bring higher prices for zinc metal.

Sherritt's 1980 zinc sales, at a realized price of 43¢ Can. on a smaller volume than in 1979, brought in 5% of the company's total revenue, compared with 8% last year.

By-product gold and silver values in our mine concentrates yielded considerably more revenue in 1980 than 1979, reflecting dramatic increases in production and price of both metals. The percentage of our revenue from precious metals increased from 5% in 1979 to 7% in 1980.

At the Agassiz gold property near Lynn Lake, Manitoba, a diamond drill crew works to determine the thickness and grade of the orebody. With present precious metal prices, low-grade properties like this one have become worth considering for exploitation.



# metal refining

## Operations

Sherritt's nickel refinery at Fort Saskatchewan operated at near maximum capacity during 1980, producing 12% more than in 1979 for a total of 35,792,000 pounds. Our existing feed supplies should allow us to maintain similar production levels in 1981.

Cobalt production again set a new record. The 1,526,000 pounds produced during 1980 exceeded the previous record, set in 1979, by 14%. With the expansion of the cobalt refining facilities completed during the year, we expect production to increase to 1,800,000 pounds in 1981.

Production of copper sulphide dropped to 531,000 pounds of contained copper, almost 50% below the 1979 output. This trend is due to the considerably reduced copper content in our current feed materials.

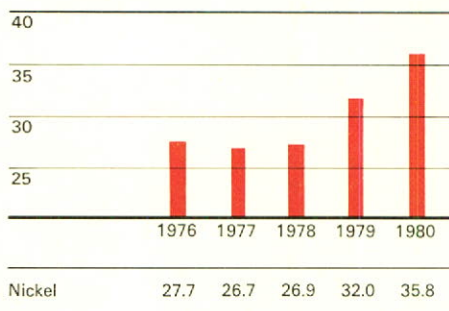
Operating profit from the refinery decreased to \$20,607,000, a drop of 22% from 1979 earnings. The main reason for the decrease is the current higher cost of feed materials. Lower sales volumes and prices for cobalt and higher costs for maintenance materials, natural gas, administrative expenses, and employee benefits were also contributing factors. These negative factors were partially offset by the higher sales volumes and prices for nickel.

## Metal Refining Sales Revenue

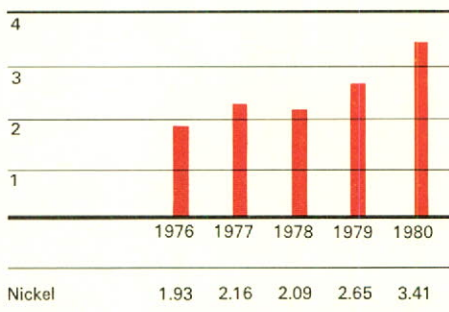
(figures in thousands)

	1980		1979	
Nickel	31,177 lb.	\$106,436	25,491 lb.	\$67,658
Cobalt	432 lb.	11,749	583 lb.	20,018
Copper, precious metals and custom refining		2,793		3,181
<b>Total</b>		<b>\$120,978</b>		<b>\$90,857</b>

## Refined Nickel Production (million lb.)



## Average Price Received – Nickel (\$ per lb.)



## Markets

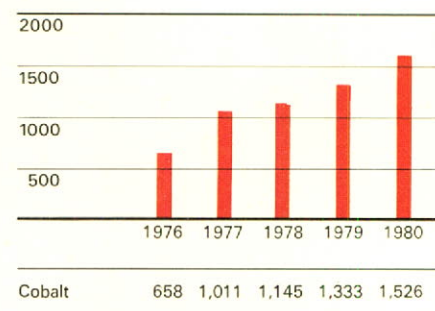
Estimated nickel consumption in the non-communist world during 1980 was 500,000 tonnes, about 15% below 1979. Producer shipments in aggregate were probably somewhat less than consumption, due to inventory draw-downs by consumers.

Prices posted by the major producers for Class I nickel averaged \$3.38 U.S. per pound during 1980; the year-end price of \$3.24 U.S. reflected a discount introduced by Inco Limited in November. LME prices ranged between \$2.75 and \$3.25 U.S. per pound, and the year-end price was \$2.95 U.S.

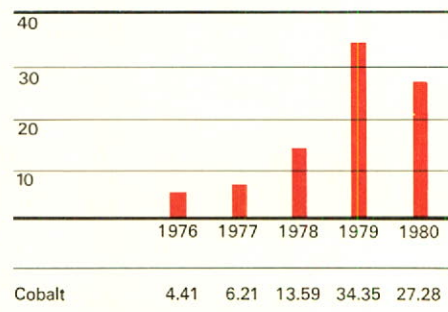
Sherritt's nickel sales volumes and prices were significantly higher in 1980 than in 1979. Nickel contributed 30% of the company's gross revenue for 1980, up from 23% in 1979.

Reduced consumption of cobalt in the free world paralleled that of nickel, with an estimated drop of about 15 to 20% below 1979 levels. Better cobalt

## Refined Cobalt Production (thousand lb.)



## Average Price Received – Cobalt (\$ per lb.)

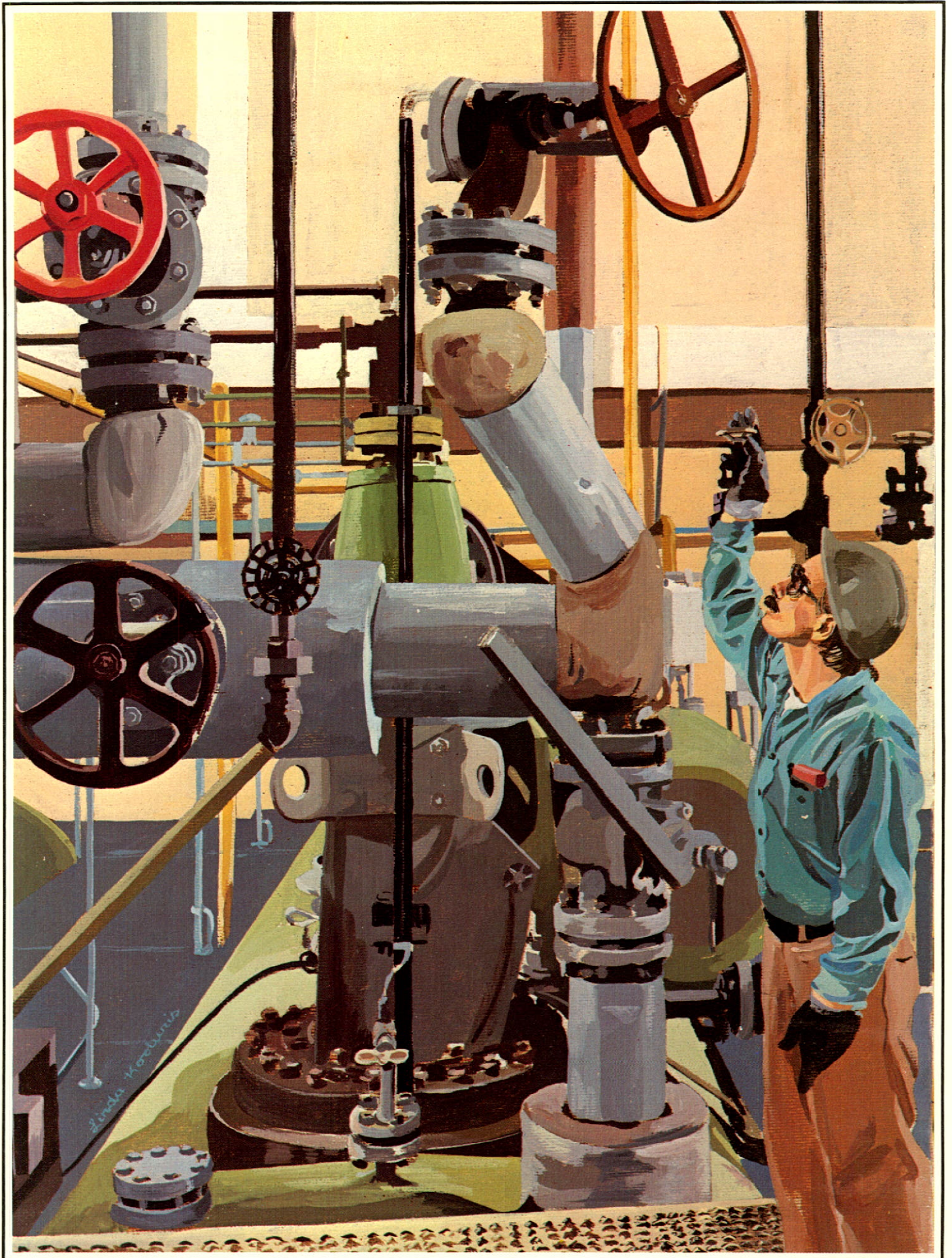


availability encouraged consumers to lower their inventory levels, so producer inventories increased considerably. Although no official figures were published, it appears that producers have about six months' supply of cobalt on hand.

The producer price of cobalt is effectively controlled by Zaire and Zambia, which together account for more than 60% of free-world primary cobalt production. The producer price was \$25 U.S. per pound throughout 1980. Custom refiners' production competed for free-market consumers. Price levels in this market began the year at a slight discount, but by year end the discount structure approached 18%, with prices of about \$21 U.S. reported. It is estimated that less than 10% of total primary cobalt sales were at merchant price levels.

Although Sherritt again augmented production of cobalt metal, the increase was fully committed to toll treatment. Our actual metal sales were lower than in 1979, causing a major revenue reduction. Cobalt sales represented 3% of our 1980 revenue, down from 7% in 1979.

This maze of piping in the nickel refinery at Fort Saskatchewan is called a Christmas tree. An operator adjusts the flow of hydrogen into an autoclave in which nickel is precipitated out of solution as fine metallic powder.



Linda Korbinis



Sinda Koolu

# fertilizers and chemicals

## Operations

All of our fertilizer plants operated at full capacity during 1980, with no major unscheduled interruptions. Production of all types of fertilizers totalled 388,000 tons, 2% less than in 1979. The slight decrease was due to a scheduled ammonia plant turnaround. A higher than normal fourth-quarter demand for fertilizers left our inventories very low at year end.

Operating profit, at \$20,709,000, was 17% above 1979. Higher tonnage sales and somewhat better prices both contributed to the improvement. However, the rapidly increasing cost of sulphur, natural gas, phosphate rock, and maintenance materials partially offset the higher sales.

At Sherritt's wholly owned subsidiary, Thio-Pet Chemicals Ltd., production levels of hydrogen sulphide and carbon disulphide were substantially the same as in 1979. After trial production and testing, Thio-Pet began limited semi-

commercial production of xanthates toward the end of the year. Xanthates are used as flotation reagents in ore concentrating mills.

## Markets

Sales volume for fertilizers and chemicals was a record 497,000 tons, up 39,000 tons from a year ago. Revenue at \$66,690,000 was 21% above the 1979 level, also a record. Increased sales volume was partly attributable to strong fall purchases by customers, and year-end inventories were at below-normal levels. Fertilizers accounted for 19% of the company's gross revenue, up slightly from the 18% share last year.

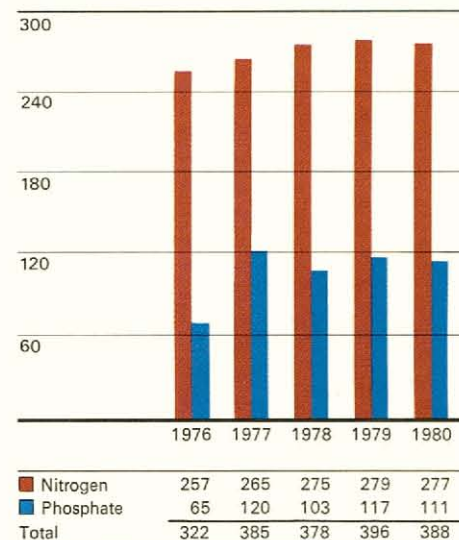
With final approval of the expansion program, we are concentrating our efforts on improving our product distribution network. Prospects for growth of nitrogen sales are excellent, with grain prices increasing substantially over the past year.

## Expansion

Our expanded fertilizer facilities will include an 1100-ton-per-day ammonia plant, a 1000-ton-per-day urea synthesis and granulation plant, associated offsite utilities, and storage and loadout facilities. A 30,000-ton ammonia storage tank will be built near Watson, Saskatchewan. We have obtained the necessary permits for construction, including those required under the Alberta Clean Air and Clean Water Acts.

Associated-Pullman Kellogg Ltd. of Calgary is the general contractor for the project. The ammonia plant will use the medium-energy ammonia process developed by Pullman Kellogg of Houston, Texas. The urea synthesis

**Fertilizer Production**  
(figures in thousands of tons)



technology will be based on the Stamicarbon B.V. process. Nederlandse Stikstof Maatschappij N.V. of Brussels, Belgium, will supply the urea granulation technology.

Foster Wheeler Energy Corporation of Livingston, New Jersey, is responsible for the engineering and procurement of the urea synthesis and granulation plants, while Associated-Pullman Kellogg will engineer and procure equipment for the ammonia plant and related offsite storage and loadout facilities, and will oversee all construction.

Design work has been under way since July and site clearing was completed in November. Construction will begin early in 1981, and start-up of the new plants is scheduled for early in 1983.

## Fertilizer and Chemical Sales Revenue

(figures in thousands)

		1980		1979
Fertilizers				
Nitrogen	354 tons	\$42,139	314 tons	\$33,658
Phosphate	117 tons	22,192	126 tons	19,799
	471 tons	64,331	440 tons	53,457
Chemicals	26 tons	2,359	18 tons	1,871
Total		\$66,690		\$55,328

In western Canada there is a trend towards the use of sophisticated equipment for applying fertilizers. Many Sherritt dealers now have vehicles such as this Terra-Gator for spraying fertilizers on their customers' fields.

# fabricated metal products

because of reduced sales volume, different product mix, and a significant increase in operating costs.

## Markets

Revenue from all fabricated metal products totalled \$34,223,000, slightly below the sales record set in 1979.

Demand for our specialty nickel and composite powders was weak in the first half of the year, reflecting the economic recession in the United States. Increasing activity by turbine engine manufacturers resulted in improved fourth-quarter sales; prospects are favourable for increasing sales of products used in abradable seal applications. Sales of dispersion-strengthened nickel increased significantly for both aircraft and land-based turbine engine applications.

Shipments of nickel strip to the Royal Canadian Mint were lower than in 1979, but exports of pure nickel coin blanks increased substantially, particularly to the Netherlands. We minted a small order of nickel coins in proof condition for Singapore.

During 1980 we delivered two orders of N-B-S coins to Costa Rica and one to Ecuador. There are now six N-B-S coins in circulation in four countries, and a number of other central banks are showing interest in this product.

Our medallion business continued to grow both in Canada and abroad. Our largest order was for the Alberta government; we minted medallions in gold, silver, and N-B-S to commemorate the province's 75th anniversary.

Fabricated metals sales accounted for 10% of Sherritt's gross revenue during 1980, slightly lower than the 11% share in 1979.

At Fort Saskatchewan, refined nickel metal is converted into a variety of fabricated metal products, each one designed for a specific industrial application. An operator pours molten nickel out of the induction melting furnace into an atomizing machine to produce a special grade of powder.

## Operations

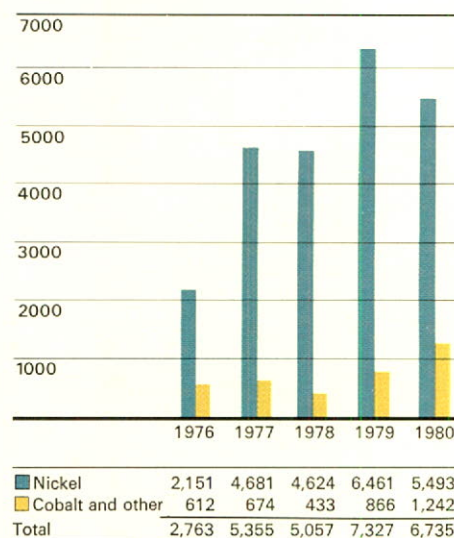
Total production of fabricated metal products was 6,735,000 pounds, 8% lower than in 1979. Demand was lower for special nickel powders and coinage strip. This was partly offset by higher sales of nickel coin blanks and Nickel-Bonded-Steel coins. Because of growing market acceptance, the planned capacity of the new N-B-S plant was increased from 1200 to 1560 tonnes. The new plant, approximately five times the size of our present plant, is scheduled for completion in mid-1981. N-B-S coin blanks will be produced for sale to national mints and for conversion to coins by the Sherritt Mint or other custom mints.

Continued operating losses at 60%-owned Spectra-Flux Inc. of Watsonville, California, prompted our decision to close this small producer of cobalt-samarium magnets.

Operating profit for fabricated metals dropped about 50%, to \$5,751,000,

## Fabricated Metal Production

(figures in thousands of pounds)



## Fabricated Metal Products Sales Revenue

(figures in thousands)

	1980		1979	
Nickel products	5,812 lb.	\$26,541	6,567 lb.	\$26,941
Cobalt products	52 lb.	2,262	41 lb.	1,941
Alloy, composite and other metal products	1,016 lb.	5,420	802 lb.	5,702
<b>Total</b>	<b>6,880 lb.</b>	<b>\$34,223</b>	<b>7,410 lb.</b>	<b>\$34,584</b>





Linda Kooluria



Jinda Kooluris

# technology

We also developed modifications to our cobalt process, to improve the leaching of various cobalt feeds and obtain premium quality product. We conducted some of this work on behalf of other companies throughout the world, as part of our ongoing effort to develop additional sources of cobalt feedstocks for the Fort refinery.

## Technology Licensing

Revenues from technology licensing totalled \$3,542,000, up from \$1,993,000 in 1979. This large increase reflects higher payment levels under existing licenses and payments for several new licenses granted during 1980. In a number of licensing arrangements, variable payments are involved, so this high level of revenue will not necessarily be sustained in future years.

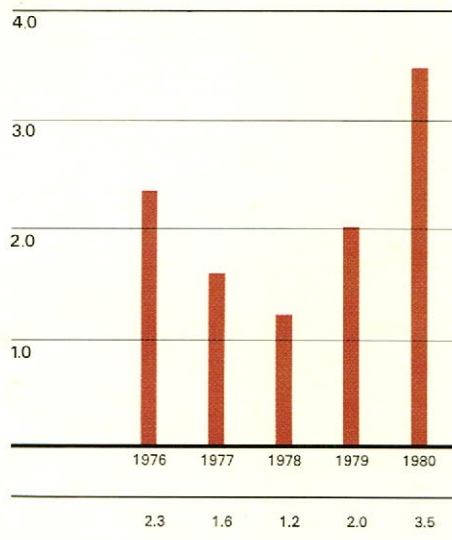
Sherritt's direct pressure leaching process for zinc concentrates continued to generate world-wide interest. Towards the end of the year Cominco Ltd. started up a zinc plant using our process at Trail, B.C. We signed an agreement with Texasgulf Canada Limited to provide the technology for installation of a pressure leaching plant at that company's zinc smelter in Timmins, Ontario. This new facility is scheduled to be on stream by the end of 1981.

Total nickel production at 10%-owned Marinduque Mining & Industrial Corporation in the Philippines was 55,950,000 pounds, about 75% of design capacity. This was a new record for Marinduque, up from 47,000,000 pounds produced in 1979. Cobalt recovered in the mixed sulphides amounted to 2,933,000 pounds, down from 3,000,000 pounds in 1979. During the year, Marinduque proceeded with plans to replace its oil-burning equipment with coal-burning facilities for ore drying and for steam and power generation, to reduce operating costs.

Construction of the 19,000-tonne nickel refinery in South Africa by Matthey Rustenburg Refiners (Pty.) Ltd. continued on schedule. Sherritt's project group is providing technical services in conjunction with the licensing of our pressure leaching process for treating nickel-copper matte.

We are in negotiation with a number of companies that are interested in licensing Sherritt's cobalt production technology.

### Technology Licensing Revenue



## Product Development

During 1980 we continued development work on new abrasible seal materials made from composite powders, in close co-operation with the Pratt & Whitney Aircraft Group and Rolls-Royce Ltd. of England, and with financial assistance from the National Research Council. A new composite powder (nickel, chromium, aluminum, and bentonite) gained final approval from Pratt & Whitney.

We improved our production methods for cobalt-samarium alloy powder, which is used in the manufacture of high-strength permanent magnets. We expect increased sales volumes in 1981.

We have developed a wear-resistant material to prolong the effective life of heavy-equipment parts subjected to abrasive operating conditions. Results of the first field tests, in Sherritt's mines and elsewhere in western Canada, were encouraging, and we are now firming up specifications and quality control procedures. Production and marketing arrangements will soon be complete.

## Process Development

With our nickel refinery fully committed to the purchase and treatment of feed materials from outside sources, our research staff increased their efforts to adapt the refinery to the changes in feed compositions.

**At the Sherritt Research Centre, about 90 scientists and technicians work on the development of new metallurgical processes and metal products for industrial use. Here, a chemist analyzes a batch of solution samples for nickel, copper, and cobalt.**



Linda Koobman

# exploration and development

During 1980 Sherritt dramatically increased involvement in exploration activities. We have established a mineral resource group in our Toronto office and have opened an energy resources office in Calgary to facilitate our expanded exploration efforts.

## Mineral Resource Development

Our expenditures for mineral exploration and development outside our two currently operating mines almost tripled over 1979, to \$3,908,000. The range of our activities was also much broader than in the past.

During 1980 we completed almost 11,300 line miles of airborne geophysics, 1,500 line miles of ground geophysics, and 65,800 feet of diamond drilling. We staked the equivalent of 616 claims in a variety of locations.

The bulk of our exploration activity in northern Manitoba focussed on the Agassiz property near Lynn Lake, optioned from Comiesa Corporation late in 1979. We completed 52,500 feet of drilling from surface. Results indicate 1,500,000 tons of ore averaging 0.13 ounces of gold and 0.2 ounces of silver per ton, to a depth of 1200 feet. A preliminary feasibility study, prepared by Sherritt engineers and an outside consulting firm, was based on a mining rate of 1,000 tons a day and use of the mothballed Lynn Lake mill. In 1981 we plan to deepen the existing shaft on the property and develop drifts for

**A drill crew contracted by BowRio Resources Limited—now 25% owned by Sherritt—explores for gas and oil in central Alberta near Red Deer. Sherritt participated in the drilling of 42 wells during 1980.**

diamond drilling to determine the downdip extension of the ore zone.

In the Kenora-Dryden and Red Lake areas of northern Ontario, we acquired a number of gold prospects during 1980, through options and staking. A diamond drilling program confirmed the existence of 50,000 tons of potentially economic ore grades on one prospect. We plan intensive exploration work on several other prospects during 1981, and we hope to establish sufficient tonnage to justify the installation of a central gold mill, capable of treating 200 to 300 tons of ore per day.

During 1980 we took an option on three former gold producing properties in central Nova Scotia. Between 1895 and 1947, these properties produced 125,000 ounces of gold from 270,000 tons of ore. Mining terminated in material that would be considered mineable ore at today's prices. In 1981 we plan to delineate extensions of the gold-bearing structures by diamond drilling.

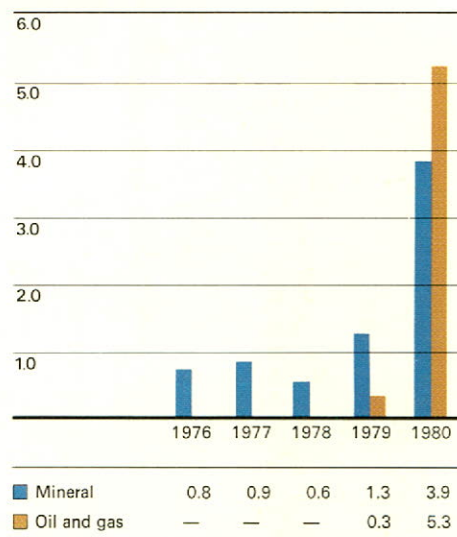
The Cargill phosphate deposit near Kapuskasing, Ontario, acquired under option from International Minerals & Chemical Corp. (Canada) Ltd. during 1979, was explored intensively during 1980. We confirmed the reliability of previous sampling to a depth of 200 feet. Using IMC's information on grades and tonnages, we laid out a preliminary design for an open pit that could produce 500,000 short tons per year of 39% P<sub>2</sub>O<sub>5</sub> phosphate rock for a minimum of 17 years. Towards year end we began an extensive drilling program to establish mineable reserves in adjacent deposits. Our 1981 program includes conceptual design for the concentrator, a test pit, a pilot mill program, capital cost estimating, and a feasibility study for a phosphoric acid plant. We are also holding discussions with other companies to consider their involvement in the project.

## Oil and Gas Exploration

In 1980 our expenditures for oil and gas exploration and development increased to \$7,532,000, compared with \$1,305,000 in 1979. Our new energy resources office in Calgary has responsibility for directing our exploration activities and for acquiring contract gas supplies for our metal and chemical operations at Fort Saskatchewan.

In the future, these two activities will be closely integrated with the study of related energy opportunities for the company in western Canada.

## Exploration Operating Costs (\$ millions)



During 1980, as in 1979, Sherritt's involvement in petroleum exploration was through joint ventures with BowRio Resources Limited and Forest Oil Corporation. We had a working interest ranging from 2% to 30% in the drilling of 42 wells during the year.

Towards year end we increased our interest in BowRio from 18% to 25%, with the purchase of 200,000 more common shares. We invested \$2,942,000 in the BowRio program, participating in the drilling of 39 wells during the year. Three of these brought in oil discoveries, 16 were gas discoveries, and 20 were dry and therefore abandoned. Oil production was insignificant and at year end all the gas wells remained shut-in due to lack of a market. We plan to continue our participation with BowRio during 1981.

Of three deep tests drilled with Forest Oil Corporation in the west central portion of the Alberta Deep Basin during the year, two showed non-commercial quantities of oil and gas and were therefore abandoned. In the third, small volumes of light-gravity oil were discovered in the Devonian formation, and a pump will be installed. Increased production rates and higher crude oil prices could make the well economic and add value to surrounding leases. We also participated in the acquisition of a Crown licence on 4,480 acres to the east of the Elmsworth gas play. The major part of the expenditures on the Forest program was charged to earnings in 1980.

By the end of the year we had a working interest in 241,260 acres of petroleum and natural gas rights in Alberta and northeastern B.C.



# personnel

The major concern of Sherritt's personnel management during 1980 was the ongoing problem of recruiting and retaining enough qualified personnel to keep our operations functioning at top efficiency. While our year-end statistics reflect a slight increase in our workforce since the end of 1979, the overall figures do not reflect the reality of the situation.

During the year, 402 full-time employees were recruited in Alberta, but our total employment in that province increased by only 55. In Manitoba, the balance was even worse: although we recruited 562 full-time employees, we ended the year with a net loss of nine people.

In a period of economic downturn and high unemployment rates nationwide, this situation may appear puzzling at first glance. There are several reasons for this anomaly, which is not unique to Sherritt but is being experienced throughout the mining and metals industry.

Industrial development in Alberta, particularly in the petroleum sector, has been at a high level, at least until the National Energy Program was announced. The resulting low unemployment rate in the province has made job-changing easy and attractive for skilled people. In our mining operations in Manitoba, the skills most in demand are in very short supply. Canadian

tradespeople with the skills we need often choose to live and work in less isolated areas.

Resolving our manpower shortage is clearly fundamental to the long-term success of the company, and we are tackling the problem in a number of ways.

During 1980 we reviewed the benefits programs of our salaried employees and made major improvements in our group insurance and pension arrangements. These steps will enhance our competitive position as an employer.

Because accommodation costs are higher in our northern towns of Lynn Lake and Leaf Rapids than in other comparable locations, we have undertaken to subsidize such costs. During the year we also increased the housing supply in Leaf Rapids by about 50 units.

We have strengthened our efforts to upgrade the skills of our current employees. In Alberta we have designed and introduced a new training program to develop and upgrade basic operating skills throughout the plant. During 1980 we also had 30 employees registered in a power engineering course.

In Manitoba, Sherritt, Inco Limited, and Hudson Bay Mining and Smelting Co. Limited, in co-operation with Keewatin College in The Pas, have initiated a two-year co-operative program in mining technology. Also, at any given time, there are about 150 Sherritt employees involved in apprenticeship training programs in our mining division.

Again in 1980, we recruited tradesmen in Britain, where there is a larger pool of people with the skills we need. Early in 1981, 20 Britons—the maximum number the Canadian government would allow us to recruit—will be joining our Manitoba workforce.

We are also taking steps to improve internal communications and inform employees more fully about company news. In both Alberta and Manitoba, quarterly newsletters published on location were introduced during the past year and have proven very popular with employees. We also published the first annual report for employees, to give Sherritt people in all our operations a clearer view of the activities of the whole company and to enhance their pride in Sherritt's achievements.

Through the Mining Association of Canada we are working with other companies to deal with industry-wide recruiting problems. We are represented on the MAC's human resources committee, which is launching an aggressive recruiting program during 1981, and on the public relations committee, which is developing an advertising program designed to improve the image of the industry in the minds of the Canadian people.

Neither of our labour contracts was up for renewal during 1980, but our agreement with the Energy and Chemical Workers' Union at Fort Saskatchewan expires in April 1981, and negotiations for a new contract are now under way. In Manitoba, our existing contracts with the United Steel Workers of America run until June 1982.

<b>Personnel</b>	<b>1980</b>	<b>1979</b>
Manitoba	1,225	1,234
Alberta	1,029	974
Ontario	69	63
Other	5	6
<b>Total</b>	<b>2,328</b>	<b>2,277</b>

# consolidated balance sheet

As at December 31, 1980  
(with 1979 figures for comparison)  
(thousands of dollars)

Sherritt Gordon Mines Limited  
(Under the Business  
Corporation Act, Ontario)

<b>Assets</b>	1980	1979
<b>Current</b>		
Cash including interest-bearing deposits	\$ 1,599	\$ 15,423
Accounts receivable		
Trade	58,311	68,417
Other	1,860	1,032
Inventories (note 2)	85,991	83,130
Prepaid expenses	1,410	1,125
	<b>149,171</b>	<b>169,127</b>
<b>Fixed (note 3)</b>	<b>141,004</b>	<b>125,270</b>
<b>Other</b>		
Investments (note 4)	10,759	10,515
Employee housing and other loans	6,537	5,955
Patents and non-producing assets at cost		
less amounts written off	1,521	1,553
Unamortized foreign exchange loss (note 6)	—	2,763
	<b>18,817</b>	<b>20,786</b>
	<b>\$308,992</b>	<b>\$315,183</b>

## Liabilities and Shareholders' Equity

<b>Current</b>		
Bank indebtedness (note 5)	\$ 57,691	\$ 6,005
Accounts payable	50,481	42,522
Income and resource taxes	3,030	25,135
Current portion of long-term debt	—	2,570
	<b>111,202</b>	<b>76,232</b>
<b>Long-term debt (note 6)</b>	<b>—</b>	<b>59,106</b>
<b>Provision for future income and resource taxes</b>	<b>39,730</b>	<b>36,449</b>
<b>Shareholders' equity</b>		
Capital stock (note 7)	12,832	12,809
Contributed surplus (note 7)	26,075	25,970
Retained earnings	119,153	104,617
	<b>158,060</b>	<b>143,396</b>
	<b>\$308,992</b>	<b>\$315,183</b>

Approved by the Board:  
Edward L. Donegan, Director  
David D. Thomas, Director

The accompanying notes  
are an integral part  
of the financial statements.



# consolidated statement of earnings

for the year ended December 31, 1980  
(with 1979 figures for comparison)  
(thousands of dollars)

Sherritt Gordon Mines Limited

	1980	1979
<b>Revenue</b>		
Metal sales	\$288,286	\$245,020
Fertilizer and chemical sales	66,690	55,328
Technology licensing, interest and other income	4,912	4,226
	<b>359,888</b>	<b>304,574</b>
<b>Costs and expenses</b>		
Operating costs	277,132	212,635
Technology	2,167	(883)
Resource exploration		
Minerals	3,908	1,347
Oil and gas	5,304	314
Selling and administration	6,638	5,457
Interest	5,369	4,842
Depreciation and amortization	14,552	12,043
Foreign exchange loss—net	16	698
	<b>315,086</b>	<b>236,453</b>
<b>Earnings before taxes</b>	<b>44,802</b>	<b>68,121</b>
<b>Income and resource taxes (note 10)</b>		
Current	13,432	23,392
Future	3,281	3,763
	<b>16,713</b>	<b>27,155</b>
<b>Net earnings before unusual item</b>	<b>28,089</b>	<b>40,966</b>
<b>Foreign exchange loss on redemption of income debentures</b>	<b>3,296</b>	<b>—</b>
<b>Net earnings</b>	<b>\$ 24,793</b>	<b>\$ 40,966</b>
<b>Earnings per share</b>		
Before unusual item	\$ 2.19	\$ 3.20
Net earnings	\$ 1.93	\$ 3.20
<b>Dividends per share</b>	<b>\$ .80</b>	<b>\$ 1.20</b>

# consolidated statement of retained earnings

for the year ended December 31, 1980  
(with 1979 figures for comparison)  
(thousands of dollars)

	1980	1979
Balance at beginning of the year	\$104,617	\$ 79,011
Net earnings	24,793	40,966
	<b>129,410</b>	<b>119,977</b>
Dividends	10,257	15,360
Balance at end of the year	<b>\$119,153</b>	<b>\$104,617</b>

The accompanying notes  
are an integral part  
of the financial statements.

# consolidated statement of changes in financial position

for the year ended December 31, 1980  
(with 1979 figures for comparison)  
(thousands of dollars)

Sherritt Gordon Mines Limited

	1980	1979
<b>Working capital was obtained from</b>		
Operations for the year		
Net earnings	\$ 24,793	\$ 40,966
Items not affecting working capital		
Depreciation and amortization	14,552	12,043
Future income and resource taxes	3,281	3,763
Foreign exchange loss (note 6)	3,518	574
	<b>46,144</b>	<b>57,346</b>
Issue of capital	128	131
	<b>46,272</b>	<b>57,477</b>
<b>Working capital was used for</b>		
Expenditures on capital and deferred assets		
Mining	11,763	11,046
Metal refining	3,089	1,107
Fabricated metals	2,195	528
Fertilizers and chemicals	3,446	1,829
Fertilizer expansion	7,475	—
Oil and gas	2,228	991
Investments	143	400
Employee housing and other loans	581	359
Patents and non-producing assets	160	(145)
	<b>31,080</b>	<b>16,115</b>
Dividends	10,257	15,360
Reduction of long-term debt	59,861	2,570
	<b>101,198</b>	<b>34,045</b>
<b>Increase (Decrease) in working capital</b>	<b>(54,926)</b>	<b>23,418</b>
<b>Working capital at beginning of the year</b>	<b>92,895</b>	<b>69,463</b>
<b>Working capital at end of the year</b>	<b>\$ 37,969</b>	<b>\$ 92,895</b>

The accompanying notes are an integral part of the financial statements.

# notes to consolidated financial statements

December 31, 1980

## 1. Summary of Significant Accounting Policies

a) **Presentation of Financial Statements** The consolidated financial statements include the accounts of Sherritt Gordon Mines Limited and its active subsidiary companies.

b) **Translation of Foreign Currencies** Transactions in foreign currencies are translated into Canadian dollars at rates prevailing at the time of such transactions, except that current assets, current liabilities, and long-term debt are translated at the rate of exchange at year end.

c) **Revenue Recognition** Revenue from metals contained in mine concentrates is recognized in the month of production and is subject to adjustment on, or prior to, settlement to reflect changes in settlement quantities and metal market prices. Revenue from other products is recognized at the time of shipment.

d) **Inventory Valuation** Mine production is valued at estimated net realizable value. Other finished products, raw materials, materials in process, and operating supplies are valued at the lower of average cost and net realizable value.

e) **Exploration and Development Costs** Minerals—Costs of exploring for new ore occurrences are charged to earnings in the period in which they are incurred. Development costs relating to a new ore occurrence are deferred until production commences, after which only development costs of a capital nature are deferred.

Oil and gas—Costs of exploring for oil and gas are accounted for using the successful efforts method, under which those costs resulting directly in identifiable future benefits through the discovery, acquisition, or development of specific reserves are deferred. Costs that do not provide identifiable future benefits are charged to earnings either as incurred or at the time the costs are determined to be non-productive.

f) **Depreciation and Amortization** Depreciation of plant and equipment costs and amortization of development costs and patents are charged to earnings as follows:

(i) Mining: depreciation and amortization of the assets of the mines are charged to operations using the unit of production method based on metallic content of the estimated recoverable ore reserves.

(ii) Metal refining, fabricated metals, fertilizers and chemicals: depreciation is provided on a straight-line basis over the estimated useful lives of the assets.

(iii) Patents: amortization is provided on a straight-line basis over the lives of the patents.

g) **Income and Resource Taxes** The company follows the tax allocation method of providing for income and resource taxes.

Taxable income may be different from reported earnings before taxes, principally because capital cost allowances and development expenditures claimed for tax purposes differ from depreciation and amortization recorded. The difference between the taxes calculated as payable each year and those charged against earnings using the tax allocation method is accumulated and carried forward in the balance sheet under the heading Provision for Future Income and Resource Taxes.

## 2. Inventories (thousands of dollars)

	1980	1979
Concentrates	\$22,588	\$23,740
Refined metal products	27,628	25,062
Fertilizers and chemicals	2,411	2,645
Raw materials and materials in process	21,439	21,409
Operating supplies	11,925	10,274
	<b>\$85,991</b>	<b>\$83,130</b>

## 3. Fixed Assets (thousands of dollars)

	Property, plant and equipment			Unamortized development costs	Total
	Cost	Depreciation	Net cost		
Mining	\$ 91,089	\$ 33,606	\$ 57,483	\$ 36,733	\$ 94,216
Metal refining	34,956	27,021	7,935	—	7,935
Fabricated metals	10,104	4,402	5,702	—	5,702
Fertilizers and chemicals	62,556	40,099	22,457	—	22,457
	198,705	105,128	93,577	36,733	130,310
Fertilizer plant under construction	7,475	—	7,475	—	7,475
Oil and gas	—	—	—	3,219	3,219
<b>1980</b>	<b>\$206,180</b>	<b>\$105,128</b>	<b>\$101,052</b>	<b>\$ 39,952</b>	<b>\$141,004</b>
1979	\$184,344	\$ 95,532	\$ 88,812	\$ 36,458	\$125,270

## 4. Investments (thousands of dollars)

	Common shares	Percentage owned	1980	1979
Marinduque Mining & Industrial Corporation	9,414,877	10	\$ 6,752	\$ 6,752
P.T. Pacific Nikkel Indonesia	33,747	8	3,314	3,314
BowRio Resources Limited	600,000	25	600	400
Other companies			93	49
			<b>\$10,759</b>	<b>\$10,515</b>

The investments in Marinduque Mining & Industrial Corporation and P.T. Pacific Nikkel Indonesia are considered to be of a long-term nature and are valued on the basis of historical cost.

The quoted market value of the investment in Marinduque shares at December 31, 1980 was \$15,466,000 (1979: \$13,060,000). Nickel, cobalt, and copper production comprise the bulk of this company's business.

There is no quoted value for shares of P.T. Pacific Nikkel Indonesia. The company was formed to evaluate the potential for development of a nickel orebody in Indonesia. This evaluation is continuing, but no decision has been taken to bring the orebody into production. Sherritt discontinued additional financial participation in 1974 and its equity participation has been diluted as a result of continued financial support by the other shareholders since that time.

The investment in BowRio Resources Limited, a Calgary-based oil and gas exploration company, is carried at cost.

## 5. Bank Indebtedness

Certain receivables and inventories of the company have been pledged as security for bank indebtedness.

## 6. Long-term Debt

On April 18, 1980, the board of directors authorized the redemption of the income debentures amounting to \$52,800,000 U.S. On completion of the redemption, the realized exchange loss less amounts previously amortized amounted to \$3,296,000. Interest on income debentures for the year ended December 31, 1980, amounted to \$2,120,000 (1979: \$4,785,000) and is not an allowable deduction for income tax purposes.

The company has entered into an agreement with two Canadian chartered banks to cover the financing of a new fertilizer plant, providing for a long-term loan of \$260,000,000, limited to 75% of the project cost, and an operating line of credit of \$40,000,000.

Prior to completion of the new plant, the amount of loans outstanding will be a general obligation of the company and will be secured by charges on the new plant facilities and on the inventory and receivables of the company's nitrogen fertilizer business. After completion, the company's obligation as to the operating line of credit and up to \$220,000,000 of the long-term loan will, subject to certain conditions, cease to be a general obligation of the company and will be limited to the security given to the banks.

Loans may be drawn in either Canadian funds or the U.S. equivalent.

Interest varies with the rate of interest charged by the lenders for Canadian or U.S. dollar loans made to their prime commercial borrowers.

Repayment of the long-term loan will be in 20 semi-annual instalments commencing the earlier of March 31, 1984 or nine months after project completion. There is provision for deferral of certain repayments of the long-term loan if cash flows from the project and existing nitrogen fertilizer business are insufficient to meet scheduled repayments. There is also provision for limited prepayments when such cash flows exceed scheduled repayments.

The plant is scheduled to be completed and in production in early 1983.

## 7. Capital Stock and Contributed Surplus

Shares authorized and issued

Authorized		
14,000,000 common shares, par value \$1 each		
Issued and fully paid	Number of shares	Amount (thousands)
January 1, 1980	12,809,105	\$12,809
Issued for cash	22,495	23
December 31, 1980	12,831,600	\$12,832

During 1980, 22,495 shares were issued under the Employee Share Purchase Plan for a cash consideration of \$128,000. The par value of these shares of \$23,000 has been credited to capital stock and the balance of the consideration of \$105,000 to contributed surplus.

At a special general meeting of the shareholders held on January 9, 1981, the authorized share capital of the company was increased by creating 6,000,000 additional common shares with a par value of \$1 each, ranking on a parity with the existing common shares of the company; and by creating 7,500,000 preferred shares without par value.

Under an agreement with a Canadian chartered bank, the company can require the bank to subscribe for \$62,500,000 of redeemable preferred shares in 1983.

## 8. Pension Plans

The company maintains pension plans for salaried and hourly paid employees.

Annual pension costs, determined at regular intervals by independent actuaries, are funded currently and include provision for current service costs and for funding of past service costs over a period not exceeding 15 years. The total cost of employee pension plans charged against earnings for the year ended December 31, 1980, amounted to \$1,655,000 (1979: \$1,211,000).

At December 31, 1980, unfunded liabilities for past service costs under these pension plans amounted to \$3,150,000 (1979: \$2,065,000).

### 9. Employee Share Purchase Plan

Under the Employee Share Purchase Plan, eligible employees are entitled to subscribe for shares of the company and to pay for such shares by payroll deduction over a period of 24 months at a price per share equal to the lesser of the average market price on the original offering dates (June 18, 1979 and June 16, 1980), or the average market price on the completion dates of purchase. At December 31, 1980, there were outstanding purchase arrangements with employees having an aggregate value of \$459,000 (1979: \$340,000).

### 10. Income and Resource Taxes

Income and resource taxes charged against earnings reflect a number of adjustments to the statutory rates of taxes payable as follows:

	Percentage of earnings before taxes	
	1980	1979
Combined federal and provincial income tax rate	51.3%	49.5%
Non-deductible income debenture costs	2.7	3.9
Resource allowance	(7.7)	(5.8)
Depletion	(5.2)	(6.8)
Other deductions and allowances	(6.0)	(4.0)
Effective federal and provincial income tax rate	35.1%	36.8%
Resource taxes—18% of mining income	2.0	3.1
Effective income and resource tax rate	37.1%	39.9%

### 11. Commitments and Guarantees

**Fertilizer Expansion** The company is committed to build and bring into production nitrogen fertilizer plants at its present Fort Saskatchewan site, designed to produce 1100 tons per day of ammonia and 1000 tons per day of urea, at an estimated cost of \$320,000,000 including interest during construction. Of this amount, \$7,475,000 has been spent to date. The plant is scheduled for start-up during the first quarter of 1983.

**Lease Commitments** The company is committed to payments under operating leases for equipment and business premises through to 1989 in the amount of approximately \$5,520,000. Annual commitments for the next five years are as follows:

1981	\$1,360,000
1982	960,000
1983	700,000
1984	640,000
1985	610,000

**Townsites and Government** Certain expenditures incurred by the Province of Manitoba and the Local Government Districts of Leaf Rapids and Lynn Lake for the development of the townsites and certain provincial highways are being amortized over periods up to 1995 through charges to the company of approximately \$695,000 annually in addition to normal municipal taxes. The company has guaranteed the repayment of the debts incurred on account of these expenditures, which obligations total \$7,700,000 at December 31, 1980.

The company has also guaranteed employees' mortgage indebtedness in these townsites amounting to approximately \$5,300,000 at December 31, 1980.

**Manitoba Hydro** Under agreement with Manitoba Hydro for the supply of power, the cost (incurred by Manitoba Hydro) of certain transmission lines to the company's mining properties is being paid by the company over periods up to the year 2013. The balance to be paid under this agreement amounts to \$1,900,000 at December 31, 1980.

### 12. Quarterly Financial Information (unaudited) (thousands of dollars except earnings per share)

	First quarter	Second quarter	Third quarter	Fourth quarter	Year
1980					
Revenue	\$106,063	\$ 81,708	\$ 67,434	\$104,683	\$359,888
Earnings before taxes	18,278	14,309	3,701	8,514	44,802
Earnings before unusual item	10,926	8,567	2,826	5,770	28,089
Net earnings	10,926	5,271	2,826	5,770	24,793
Earnings per share					
Before unusual item	\$ .85	\$ .67	\$ .22	\$ .45	\$ 2.19
Net earnings	\$ .85	\$ .41	\$ .22	\$ .45	\$ 1.93
1979					
Revenue (restated)	\$ 72,340	\$ 72,822	\$ 65,420	\$ 93,992	\$304,574
Earnings before taxes	15,028	16,342	14,991	21,760	68,121
Net earnings	8,269	9,373	9,507	13,817	40,966
Earnings per share	\$ .65	\$ .73	\$ .74	\$ 1.08	\$ 3.20

# statement of segmented information

for the year ended December 31, 1980  
(with 1979 figures for comparison)  
(thousands of dollars)

Industry Segments	Mining		Metal Refining		Fabricated Metal Products	
	1980	1979	1980	1979	1980	1979
Sales to customers	\$133,085	\$119,579	\$120,978	\$ 90,857	\$34,223	\$34,584
Inter-segment sales	—	—	21,485	16,795	—	—
Total revenue	\$133,085	\$119,579	\$142,463	\$107,652	\$34,223	\$34,584
Operating profit	\$ 14,317	\$ 18,956	\$ 20,607	\$ 26,379	\$ 5,751	\$11,119
Resource exploration						
General corporate expenses						
Interest						
Foreign exchange loss—net						
Income and resource taxes						
Net earnings before unusual item						
Identifiable assets	\$140,569	\$150,361	\$ 72,622	\$ 66,290	\$22,451	\$18,647
Capital expenditures	\$ 11,763	\$ 11,046	\$ 3,089	\$ 1,107	\$ 2,195	\$ 528
Depreciation and amortization	\$ 10,690	\$ 8,326	\$ 809	\$ 730	\$ 358	\$ 348

## Notes to Statement of Segmented Information

### 1. Industry Segments

Sherritt has four major areas of business: mining, metal refining, fabricated metal products, and fertilizers and chemicals. The rest of the company's activities have been designated as "other".

#### Mining

The headquarters of Sherritt's mining operations are in Lynn Lake, Manitoba, about 500 air miles due north of Winnipeg. Currently operating properties are Fox Mine, about 28 miles south-west of Lynn Lake, and Ruttan Mine, about 80 miles south-east of Lynn Lake. Both properties are copper/zinc mines, yielding gold and silver as by-products.

The copper and zinc concentrates produced at the two mines are shipped to Canadian refineries for further processing.

The refined copper and zinc are sold mainly in North America and Europe.

#### Metal Refining

At Fort Saskatchewan, Alberta, about 17 miles north-east of Edmonton, Sherritt operates a nickel refinery and a cobalt refinery. The refinery feed stock is either purchased or custom refined on a fee basis.

The nickel and cobalt metal is sold worldwide, in the form of briquettes, plates, or powder. Some of the refined nickel and cobalt is sold internally for further processing or fabrication.

#### Fabricated Metal Products

In our fabricated metals facilities, also at Fort Saskatchewan, we produce a range of special metal powders, strip and sheet products, and coinage blanks.

The Sherritt Mint produces a variety of coins and medallions.

Most of our fabricated products are marketed in North America. Coinage products are produced to order for a number of central banks throughout the world.

#### Fertilizers and Chemicals

At Fort Saskatchewan Sherritt also produces nitrogen and phosphate fertilizers as well as sulphuric acid, hydrogen sulphide, carbon disulphide, and xanthates. Feedstock consists of natural gas, acquired locally, for nitrogen fertilizers and phosphate rock, acquired mainly from Florida, for phosphate fertilizers.

Sherritt's fertilizer products are marketed mainly in the prairie provinces of Canada and the north-western United States. Some modest amounts are shipped to export markets.

#### Other

Technology licensing and research services, conducted at Fort Saskatchewan, constitute the major business in this category.

Also included are corporate investments, deferred oil and gas expenditures, and corporate financing activities.

To the Shareholders of  
Sherritt Gordon Mines Limited:

We have examined the consolidated balance sheet of Sherritt Gordon Mines Limited as at December 31, 1980 and the consolidated statements of earnings, retained earnings, changes in financial position, and segmented information for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

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

Deloitte Haskins & Sells  
Chartered Accountants

Toronto, Ontario  
January 23, 1981

Fertilizers and Chemicals		Other		Consolidated	
1980	1979	1980	1979	1980	1979
\$66,690	\$55,328	\$ 4,912	\$ 4,226	\$359,888	\$304,574
—	—	—	—		
\$66,690	\$55,328	\$ 4,912	\$ 4,226		
\$20,709	\$17,744	\$ 2,533	\$ 4,889	\$ 63,917	\$ 79,087
				9,212	1,661
				4,518	3,765
				5,369	4,842
				16	698
				16,713	27,155
				\$ 35,828	\$ 38,121
				\$ 28,089	\$ 40,966
\$53,902	\$46,605	\$19,448	\$33,280	\$308,992	\$315,183
\$10,921	\$ 1,829	\$ 3,112	\$ 1,605	\$ 31,080	\$ 16,115
\$ 2,489	\$ 2,423	\$ 206	\$ 216	\$ 14,552	\$ 12,043

## 2. Geographic Segments

There are no significant foreign geographic segments in which company operations are conducted.

## 3. Inter-segment Sales

Inter-segment sales of metal from the metal-refining segment to fabricated metal products are accounted for at prices comparable to those realized on sales to unaffiliated customers.

## 4. Export Sales

Direct export shipments, principally to customers in the United States and Europe, amounted to \$44,227,000 (1979: \$36,473,000). In addition, a major portion of mine production and metal refinery output, while sold to Canadian customers, is ultimately shipped to destinations outside of Canada.

# ten-year record

## 1971-1980

Sherritt Gordon Mines Limited

(figures in thousands, except share prices and per-share figures)

	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971
<b>Operating Information</b>										
<b>Ore Milled (tons)</b>										
Ruttan Mine	2,548	2,308	2,543	2,487	2,661	3,341	3,358	1,871	—	—
Fox Mine	864	852	964	890	832	1,007	1,008	963	946	1,022
Lynn Lake Mine	—	—	—	—	197	352	432	676	995	1,158
<b>Production</b>										
Copper (lb.)	81,228	74,687	73,895	75,489	76,009	87,005	100,399	72,101	41,474	60,534
Zinc (lb.)	41,473	52,959	74,695	87,477	95,369	99,953	79,102	48,380	8,986	9,605
Gold (oz.)	21	17	19	21	22	25	29	16	9	14
Silver (oz.)	499	406	473	479	484	555	749	416	231	398
Nickel (lb.)	35,792	32,018	26,920	26,688	27,708	27,937	26,172	30,262	37,321	33,111
Cobalt (lb.)	1,526	1,333	1,145	1,011	658	560	410	616	809	561
Fabricated metals (lb.)	6,735	7,327	5,057	5,355	2,763	3,887	4,455	4,087	3,393	3,178
Fertilizers (tons)	388	396	378	385	322	385	349	362	372	327
<b>Financial Information</b>										
Revenue from sales	\$354,976	\$300,348	\$229,229	\$180,463	\$179,428	\$191,479	\$192,958	\$124,092	\$ 72,861	\$ 73,958
Technology licensing, interest and other income	4,912	4,226	2,150	1,929	3,634	3,873	2,128	941	1,365	1,464
Costs and expenses	300,534	224,410	190,951	165,240	166,086	166,787	141,934	92,128	61,517	60,798
Depreciation and amortization	14,552	12,043	11,824	10,759	9,680	10,017	12,571	9,234	7,563	7,852
Income and resource taxes	16,713	27,155	14,179	2,227	3,165	7,390	17,535	2,685	55	(1,995)
Net earnings before extraordinary and unusual items	\$ 28,089	\$ 40,966	\$ 14,425	\$ 4,166	\$ 4,131	\$ 11,158	\$ 23,046	\$ 20,986	\$ 5,091	\$ 8,767
Per share	2.19	3.20	1.13	.33	.32	.88	1.81	1.65	.40	.73
Extraordinary and unusual items	3,296	—	—	—	—	—	—	—	2,784	1,270
Net earnings	24,793	40,966	14,425	4,166	4,131	11,158	23,046	20,986	2,307	7,497
Per share	1.93	3.20	1.13	.33	.32	.88	1.81	1.65	.18	.62
Dividends	\$ 10,257	\$ 15,360	\$ 6,392	\$ 1,915	\$ 4,460	\$ 7,010	\$ 9,555	\$ 8,918	\$ 6,370	\$ 7,231
Per share	.80	1.20	.50	.15	.35	.55	.75	.70	.50	.60
Capital Expenditures	\$ 31,080	\$ 16,115	\$ 26,892	\$ 14,176	\$ 6,180	\$ 11,513	\$ 14,527	\$ 20,791	\$ 30,963	\$ 11,737
Cash flow from operations	\$ 46,144	\$ 57,346	\$ 32,483	\$ 15,509	\$ 14,605	\$ 25,156	\$ 45,519	\$ 29,383	\$ 12,570	\$ 16,006
Working capital	37,969	92,895	69,463	70,174	38,140	38,472	36,409	24,779	27,375	28,968
Long-term debt	—	59,106	62,621	57,764	24,731	29,564	34,194	41,881	36,333	13,196
Shareholders' equity	158,060	143,396	117,659	109,536	107,213	107,437	103,289	89,798	77,730	81,793
Invested capital	197,790	238,951	212,966	193,857	158,438	163,145	159,935	144,403	127,306	110,759
Return on shareholders' equity †	18.6%	31.4%	12.7%	3.8%	3.8%	10.6%	23.9%	25.1%	6.4%	11.9%
Return on invested capital †	13.8%	20.2%	8.9%	3.2%	3.7%	8.2%	16.8%	16.5%	4.7%	9.1%
Share price—high	\$19.38	\$14.13	\$8.75	\$6.88	\$8.25	\$7.88	\$15.63	\$19.50	\$17.00	\$21.75
—low	\$11.13	\$7.75	\$4.30	\$4.05	\$5.00	\$4.80	\$4.10	\$13.00	\$12.00	\$10.50
<b>Ore Reserves</b>										
<b>Ruttan Mine</b>										
Tons	25,037	27,045	28,771	30,439	32,047	43,600	45,900	49,100	51,000	51,000
% Copper	1.71	1.74	1.79	1.74	1.73	1.45	1.45	1.46	1.47	1.47
% Zinc	1.18	1.18	1.20	1.25	1.25	1.45	1.52	1.60	1.61	1.61
<b>Fox Mine</b>										
Tons	5,411	5,917	6,333	7,093	7,836	8,700	10,700	11,800	13,300	14,500
% Copper	1.78	1.77	1.79	1.83	1.95	1.92	1.95	2.03	2.01	1.99
% Zinc	2.29	2.21	2.22	2.12	2.10	2.08	2.07	2.15	2.23	2.35

†Returns are calculated on average shareholders' equity and average invested capital. Return on invested capital is calculated on net earnings adjusted for interest on long-term debt.



## company locations

### Corporate Office

P.O. Box 28, Commerce Court West  
Toronto, Ontario M5L 1B1  
Telephone: (416) 363-9241  
Telex: 06-22195  
Cable: SHERONTO

### Mining and Milling Division

Divisional Headquarters  
Lynn Lake, Manitoba R0B 0W0  
Telephone: (204) 356-2201  
Telex: 076-6220

Fox Mine  
Lynn Lake, Manitoba R0B 0W0  
Telephone: (204) 356-2403

Ruttan Mine  
Leaf Rapids, Manitoba R0B 1W0  
Telephone: (204) 473-2415

Exploration Offices  
Box 723  
Dryden, Ontario P8N 2Z4  
Telephone: (807) 223-5365

R.R. #4, Middle Musquodoboit  
Halifax County, N.S. B0N 1X0  
Telephone: (902) 568-2927

### Metal and Chemical Division/ Sherritt Research Centre

Fort Saskatchewan, Alberta T8L 2P2  
Telephone: (403) 998-6911  
Telex: 037-2290

### Energy Resources Office

Suite 403, 602 11th Avenue SW  
Calgary, Alberta T2R 1J8  
Telephone: (403) 266-3884

### Marketing

1313 Toronto-Dominion Tower  
Edmonton, Alberta T5J 2Z1  
Telephone: (403) 426-3550  
Telex: 037-2768

Sherritt Fertilizers, Inc.  
3030 SW First Avenue  
Portland, Oregon 97201, USA  
Telephone: (503) 226-3758  
Telex: 36-0149

Metal Marketing/Sherritt Mint  
P.O. Box 28, Commerce Court West  
Toronto, Ontario M5L 1B1  
Telephone: (416) 363-9241  
Telex: 06-22195

### Subsidiary

Thio-Pet Chemicals Ltd.  
1313 Toronto-Dominion Tower  
Edmonton, Alberta T5J 2Z1  
Telephone: (403) 426-1093  
Telex: 037-2768

## operations management

### Mining and Milling Division

Robert D. Lindberg  
Vice-president, Mining  
Toronto

Eric Cunningham  
Manager, Divisional Services  
Lynn Lake

I. M. Plummer  
Manager, Fox Mine

R. C. McCombe  
Manager, Ruttan Mine

P. H. Goodwin  
Operations Manager  
Ruttan Mine

Garry M. Hughes  
Manager, Mineral Resource Development  
Toronto

Joop Langelaar  
Manager, Outside Exploration  
Dryden

### Metal and Chemical Division

V. N. Mackiw  
Executive Vice-president  
Toronto

Neil Colvin  
General Manager, Alberta Operations  
Fort Saskatchewan

B. W. Kushnir  
Project Director, Fertilizer Expansion

A. C. Oliver  
Manager, Administration, Alberta Operations

J. R. Kilburn  
Acting Manager, Production Groups

A. H. Lee  
Manager, Fabricated Metal Products

D. G. Maschmeyer  
Manager, Engineering and Projects

### Sherritt Research Centre

Herb Veltman  
Director

M. A. Clegg  
Manager, Product Research

D. R. Weir  
Manager, Process Research

### Energy Resources

Robert R. Topp  
Vice-president, Corporate Development  
Toronto

David B. Smith  
Director, Energy Resources  
Calgary

Gordon B. Darling  
Manager, Oil and Gas Exploration and  
Production

### Marketing

J. A. Fraser  
Vice-president, Marketing  
Edmonton

R. M. Garvey  
Manager, Metal Marketing  
Toronto

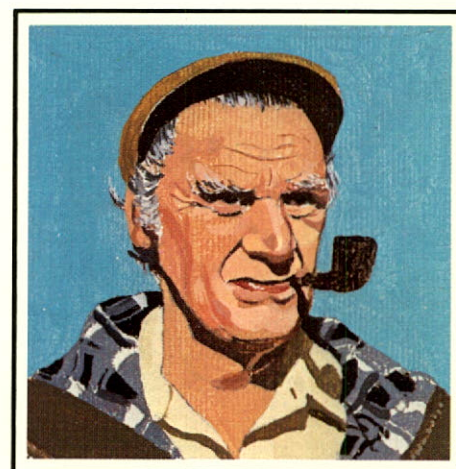
Rex F. Pearce  
Marketing Director, Sherritt Mint  
Toronto

J. M. Nichols  
Manager, Fertilizer Marketing  
Edmonton

W. R. Chorlton  
Vice-president and General Manager  
Sherritt Fertilizers, Inc., Portland

### Thio-Pet Chemicals Ltd.

A. R. Otterdahl  
General Manager  
Edmonton



# directors and officers

## Directors

W. E. P. DeRoche  
Chairman of the Board  
Partner, Blake, Cassels & Graydon

\*†Edward L. Donegan  
Partner, Blake, Cassels & Graydon

W. A. Humphrey  
Vice-president, Operations  
Newmont Mining Corporation

Robert D. Lindberg  
Vice-president, Mining

V. N. Mackiw  
Executive Vice-president

Plato Malozemoff  
Chairman of the Board and  
Chief Executive Officer  
Newmont Mining Corporation

†J. H. Parliament  
President  
Newmont Mines Limited

\*David D. Thomas  
President and  
Chief Executive Officer

\*†J. E. Thompson  
President  
Newmont Mining Corporation

## Officers

W. E. P. DeRoche  
Chairman of the Board

David D. Thomas  
President and Chief Executive Officer

V. N. Mackiw  
Executive Vice-president

J. A. Fraser  
Vice-president, Marketing

Kenneth J. Harvey  
Vice-president, Finance

Robert D. Lindberg  
Vice-president, Mining

Robert R. Topp  
Vice-president, Corporate Development

Frank I. Piper  
Corporate Secretary

Ian A. Shaw  
Treasurer

Peter S. Bleach  
Controller

Sharon M. Lax  
Assistant Corporate Secretary

## Auditors

Deloitte Haskins & Sells, Toronto

## Solicitors

Blake, Cassels & Graydon, Toronto

## Transfer Agents

Canada Permanent Trust Company  
Toronto

Morgan Guaranty Trust Company  
New York

## Bankers

Canadian Imperial Bank of Commerce  
Toronto

The Toronto-Dominion Bank  
Toronto

## Listing

Toronto Stock Exchange

\*Audit Committee Members

†Compensation Committee Members



