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**BRUNSWICK MINING AND SMELTING  
CORPORATION LIMITED**

(NO PERSONAL LIABILITY)

**noranda** group

**Annual Report 1977**







# BRUNSWICK MINING AND SMELTING CORPORATION LIMITED

(NO PERSONAL LIABILITY)

Head Office: Bathurst, N.B.  
Executive Office: Suite 4500, Commerce Court West,  
Toronto, Ont. M5L 1B6

## DIRECTORS

J. N. Anderson\*, Toronto, Ont.  
Henry Blaise, Brussels, Belgium  
E. K. Cork, Toronto, Ont.  
E. R. Fingland, Freeport, Bahamas  
Gilbert Finn\*, Moncton, N.B.  
J. G. Fritzinger, Jr., New York, N.Y.  
J. A. Hall, Toronto, Ont.  
K. C. Hendrick, Toronto, Ont.  
J. O. Hinds, Toronto, Ont.  
William James\*, Toronto, Ont.  
Gilbert Kerlin\*, New York, N.Y.  
James A. MacMurray, Saint John, N.B.  
André Monast, Quebec, P.Q.  
B. H. Morrison, Toronto, Ont.  
Alfred Powis\*, Toronto, Ont.  
\*Member of Executive Committee

## OFFICERS

William James, President  
Alfred Powis, Vice-President  
E. K. Cork, Vice-President—  
Finance and Treasurer  
J. W. Ivany, Secretary  
B. H. Grose, Assistant Secretary  
B. C. Bone, Assistant Treasurer  
D. H. Ford, Comptroller

## TRANSFER AGENT AND REGISTRAR

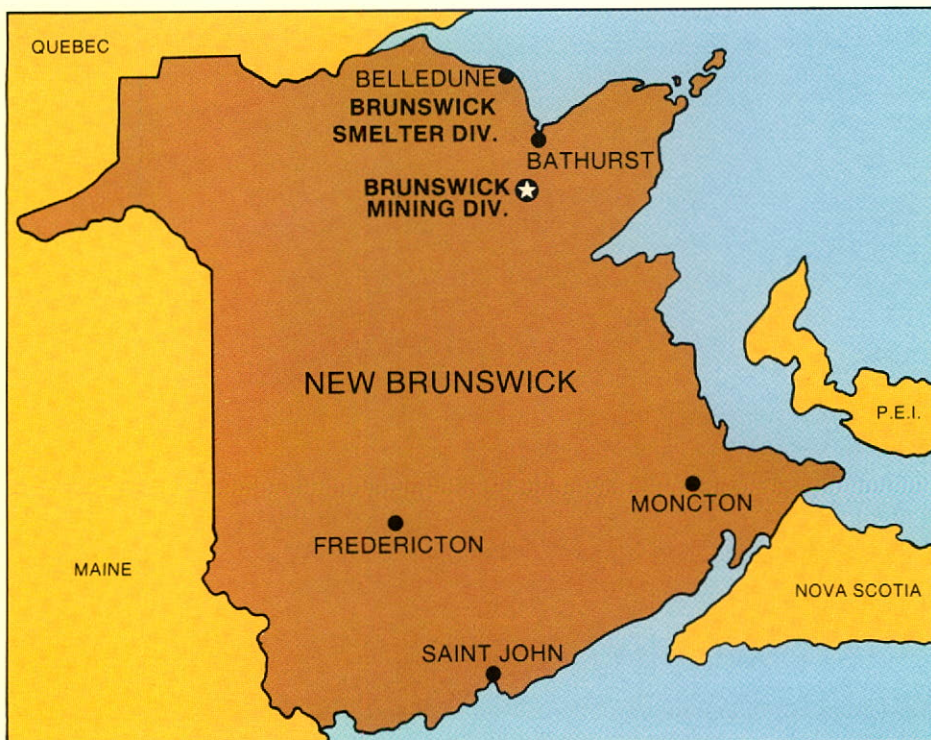
Guaranty Trust Company of Canada  
Toronto, Ont. and Montreal  
P.Q. and its agent  
The Central & Nova Scotia  
Trust Company of Canada, Fredericton, N.B.

## AUDITORS

Clarkson, Gordon & Co., Toronto, Ont.

## ANNUAL MEETING

May 16, 1978, 10:00 a.m., (Atlantic Time)  
Mine Office of the Corporation, Bathurst, N.B.



COVER:  
*Wiring mine face preparatory to blasting*



## DIRECTORS' REPORT TO THE SHAREHOLDERS

The past year was a poor one for zinc producers around the world. The cautious optimism that existed early in the year quickly gave way to a realization that world economic growth was stagnating. The result was continued accumulation of stocks and erosion of the producer price.

The European producer price of zinc, which is the basis of most of the company's sales, was reduced in stages from 36¢ U.S. per pound to 31¼¢ in May, 27.2¢ in November and 24.9¢ in February, 1978. This 30% reduction lowered profits in 1977 to \$2.4 million from \$7.5 million in the previous year.

With world-wide smelter production at 75% of capacity and mine production greater than smelter throughput, it became necessary to stockpile zinc concentrates. The value of the company's inventories of metals and concentrates grew to \$43 million at the end of 1977, significantly higher than the \$32 million in the previous year.

The effect of the reduced zinc price was partially offset by an increased lead price which averaged 28¢ U.S. per pound versus 20.5¢ in 1976, and a higher silver price which averaged \$4.62 U.S. versus \$4.35 in 1976, as well as the devaluation of the Canadian dollar which averaged 94.0¢ U.S. versus 101.4¢ U.S. in 1976.

In order to maintain a stable financial position during this period of depressed zinc markets, capital and operating expenditures have been reduced. To this end, the expansion project to increase the capacity of the mine was cut back in October and it was decided to complete the No. 3 shaft only to the 3700-foot level, instead of the originally planned 4500-foot level. Capital expenditures to date on the expansion are \$38.6 million. This program will continue at a rate compatible with the company's financial resources and world markets.

The number of employees at the mine and smelter has been reduced by 170 and 53 respectively, while maintaining output. In order to minimize the

adverse effect of these layoffs on the employees and the community, which is already hard-pressed by high unemployment, the company, the union and the federal and provincial governments devised a program of work-sharing where certain employees work a 32-hour week and receive financial assistance from the federal government for the eight hours not worked. This pilot program, which will phase out by April, 1978 has been successful in reducing the disruption to the community and the employees during a difficult period.

In light of the company's cash position the dividend, which normally would have been declared in the second half of the year, was omitted.

The ore reserves for the No. 12 orebodies at the end of 1977 are estimated at 107 million tons with a combined grade of 13% zinc-lead and 2.8 ounces of silver per ton. These reserves are sufficient for thirty years' production at the present mill capacity of 9,400 tons per day or twenty-six years' production at the proposed expanded capacity of 11,000 tons per day. Deep drilling on the No. 12 ore zones indicates that the orebodies have essentially bottomed near the 3700-foot elevation but are still open to the north.

A substantial amount of research and testing has been carried out to improve both recoveries and concentrate quality of Brunswick's complex ores. This has resulted in an increase in overall zinc recoveries in the concentrator to an average of 80% in 1977 from 75% in the previous year.

The smelter operated well and continues to have one of the best safety records in the industry, which is the result of a great deal of effort expended by all employees. A new air filtration plant was installed to improve the working environment and hygiene throughout the smelter.

The Government of New Brunswick has informed the company that it would like to continue to monitor the feasibility of building a zinc reduction plant in the Province and the company has agreed to consider any reasonable proposals in this regard. However to date it has not been possible to demonstrate that such a project has economic merit. It continues to be this company's policy

that it would undertake such a project should the construction of a zinc plant in New Brunswick prove to be economically feasible and within its financial capability.

The Province of New Brunswick enacted a new mining tax system during the year which provides for a 2% ad valorem royalty on net revenues and an increased tax on profits. This royalty enables the government to collect taxes when the company is incurring operating losses and can ill afford additional cash outlays.

Messrs. J. N. Anderson, Henry Blaise, E. R. Fingland and J. G. Fritzinger, Jr., will not be standing for re-election at the next Annual Meeting and the Board has passed a resolution reducing its membership from fifteen to eleven, rather than replacing the retirees. These men have served the company well over a number of years. The shareholders will be asked to confirm the resolution at the Annual Meeting.

At present prices the outlook for 1978 is poor, even with cutbacks in the world zinc smelter production, supply of metal will probably equal demand, which would maintain the current burdensome stock of one million tons overhanging the market. The problem is compounded because mine production of zinc concentrate is substantially in excess of smelter consumption. This will result in continuing downward pressure on the net returns to producers of concentrate. The year ahead will be an interesting one indeed. Brunswick will continue to restrict expenditures and raise efficiencies in order to compete in these markets.

All of the employees have increased productivity in the past year making Brunswick a better competitor. It is a pleasure to express the company's appreciation of their fine efforts.

On behalf of the Board,



WILLIAM JAMES,  
President,

Toronto, Ontario,  
March 15, 1978

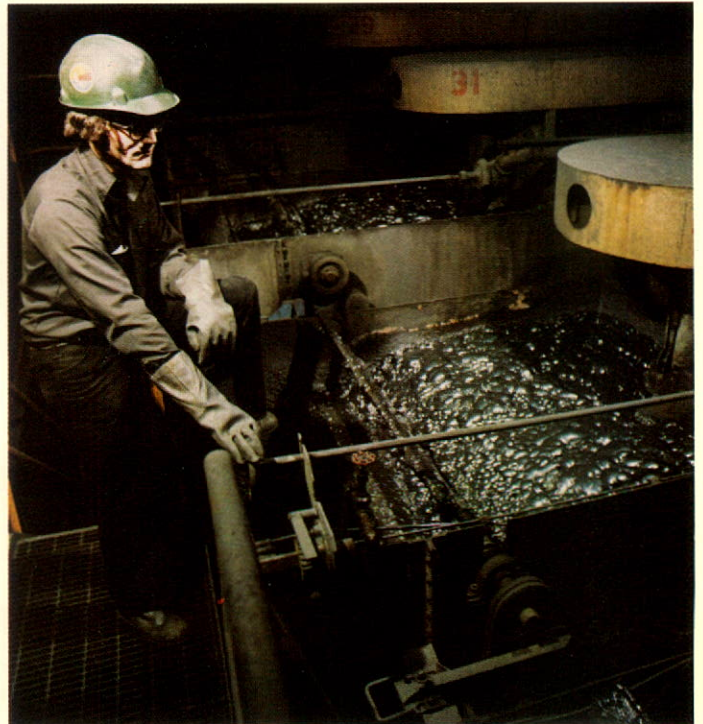




*The 'giraffe' — used for scaling at mine facing*



*Entrance to Crown Pillar*



*Operator checking section of flotation circuit*



## METAL MARKETS

The early months of 1977 were a repeat of the 1976 experience when demand for most metal and mineral products improved, reflecting strength in the automotive and housing sectors. However, this trend was not sustained, resulting in over production, increased stocks and weaker prices.

### ZINC

#### Western World Balance — '000 Short Tons

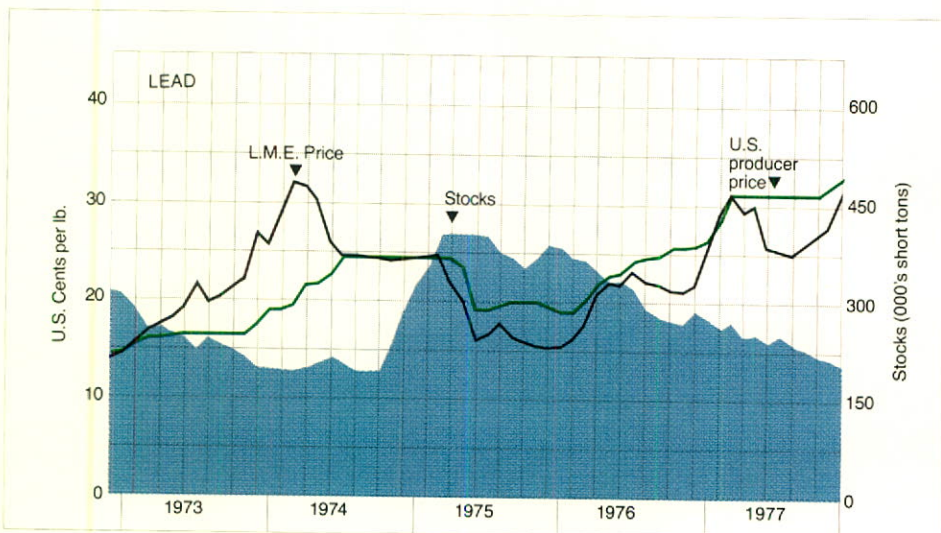
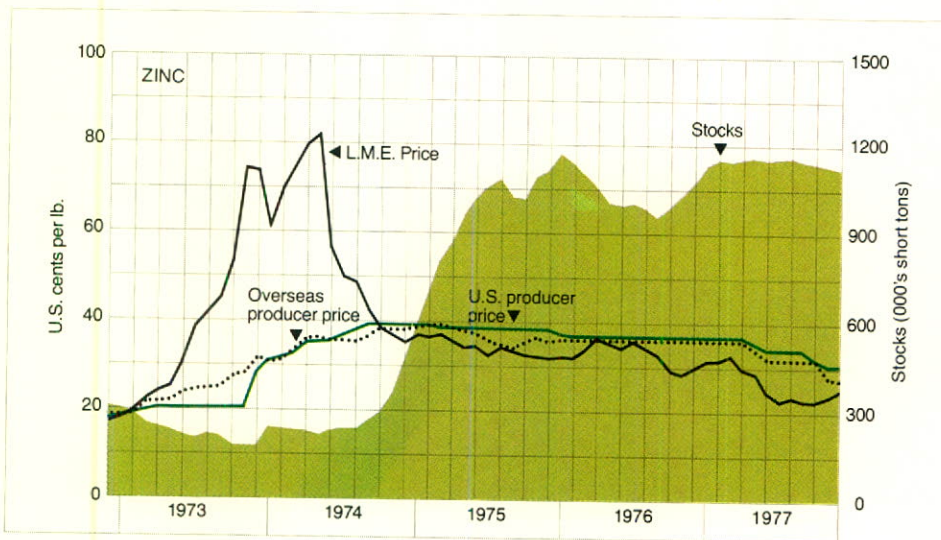
	1975	1976	1977
Supply	4,240	4,610	4,680
Consumption	3,900	4,660	4,630
Stocks*	1,120	1,070	1,120

\* Excludes consumers' stocks.

Zinc metal production continues to be above consumption and there is a growing surplus of zinc concentrate. The large metal inventory built in 1974-75 combined with consumption levels still 10% below the average 1972-74 rate are the main reasons for the very depressed market.

In December U.S. zinc producers filed an escape clause petition with the U.S. International Trade Commission, arguing increased imports are a substantial cause of serious injury. Their plea is for a tariff quota formula limiting imports to 350,000 tons in 1978 with a tenfold increase in the duty of 0.7¢ per pound to 7¢ on imports above the quota. If successful this petition would seriously affect Canadian zinc imports of metal to the U.S.A. but would not include zinc concentrate. It is imperative that the petition as presented be denied and Canadian zinc producers are co-operating with U.S. zinc consumers to this end.

The rise in zinc stocks during the second quarter of 1977 led to price discounting in Europe and a reduction in May in the overseas producer price from \$795 to \$700 U.S. per metric ton, followed by a drop of 3¢ in the U.S. price to 34¢ per pound. Prices fell further in November to \$600 and 30½¢ and in February 1978 to \$550 and 29¢, respectively.





## LEAD

### Western World Balance — '000 Short Tons

	1975	1976	1977
Supply	3,540	3,780	3,910
Consumption	3,480	3,900	4,000
Stocks*	410	290	200

\* Excludes consumers' stocks.

Particularly strong and growing demand for lead acid batteries has been the main reason for continued expansion of lead consumption. As well, the absence of significant new mine or metal capacity contributed to lower than anticipated production and reduced stocks. Consumption of lead anti-knock compounds was maintained due to greater gasoline demand although the use of lead in gasoline continues to be phased down.

Prices rose from 26¢ per pound in the U.S.A. and 23¢ on the London Metal Exchange to 33¢ and 31¢ by year-end. The Canadian price was 35.25¢ reflecting the discounted Canadian dollar at year-end.

## COPPER

### Western World Balance — '000 Short Tons

	1975	1976	1977
Supply	6,939	7,342	7,675
Consumption	6,038	7,091	7,586
Stocks*	1,743	1,994	2,083

\* Excludes consumers' stocks.

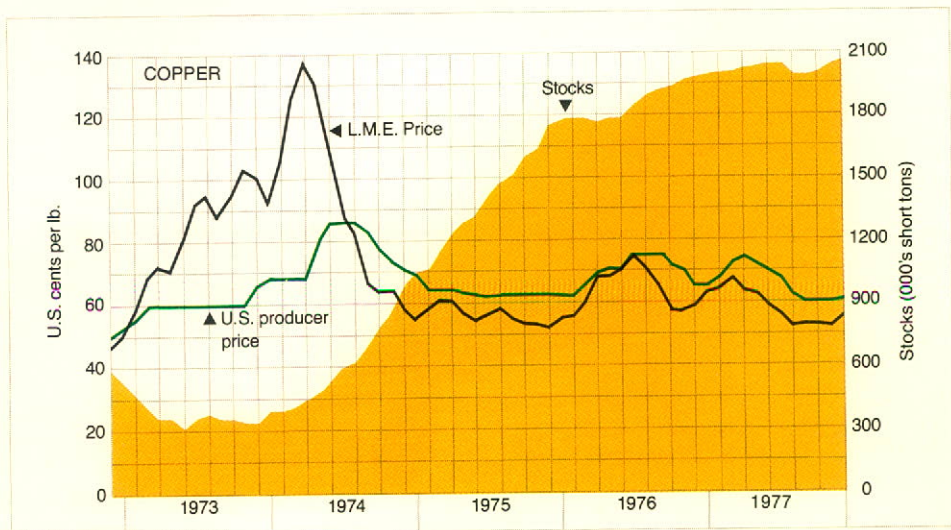
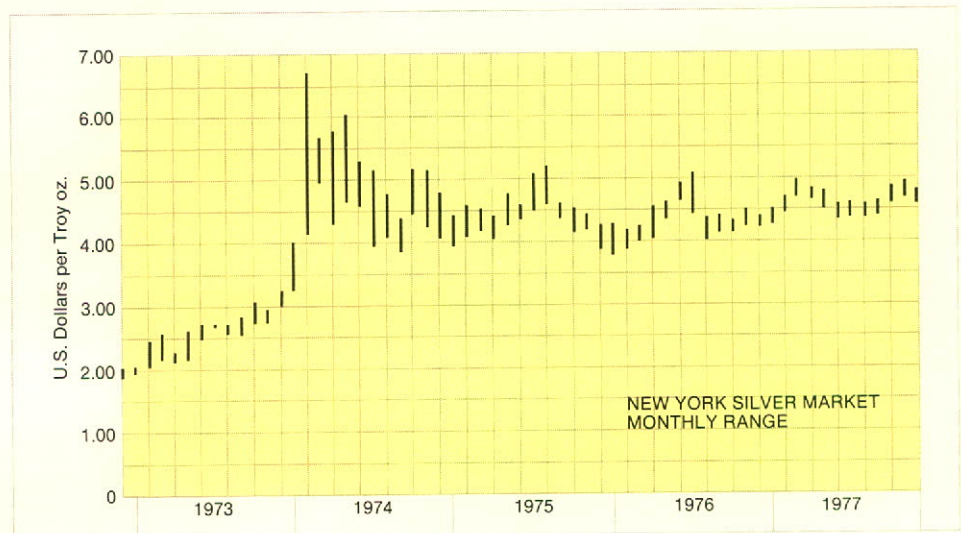
Despite the carryover of inventory from 1976, copper prices rose in the early part of the year. The heavy burden of excess stocks and continued over-production from CIPEC countries depressed prices sharply to 51¢ per pound on the London Metal Exchange in August. Record copper consumption did however provide some buoyancy to the market in the fourth quarter and the L.M.E. recovered to 57¢ at year-end. The U.S. producer quotation, which peaked at 74¢ per pound in March, was 63¢ at year-end.

## SILVER

### Western World Balance — '000 Troy Ounces

	1975	1976	1977
Supply — Primary	238	250	260
— Secondary	188	204	145
Consumption	402	425	420
Balance	24	29	(15)

Silver available from India was restricted in 1977 which was reflected in lower secondary supply. This resulted in a small deficit and prices rose from a low of \$4.31 per ounce in January to a high of \$4.97 in March and were \$4.75 at the year-end.





## Operations

### MINING DIVISION

Operations at the mine and concentrator improved steadily. The details are set out below.

#### No. 12 MINE

2,708,000 tons of ore, averaging 8.70% zinc, 3.51% lead, 0.31% copper and 2.66 ounces of silver per ton were produced from the No. 12 mine and processed through the concentrator.

The average quantity of ore hoisted per calendar day in the fourth quarter was 7,589 tons, compared to 6,460 in 1976. The average number of tons hoisted per calendar day for the year was 6,950. A new monthly record was established in April when the average tonnage hoisted was 7,756.

Ore production commenced on the 2800-level and the south end of the crown pillar reached full production.

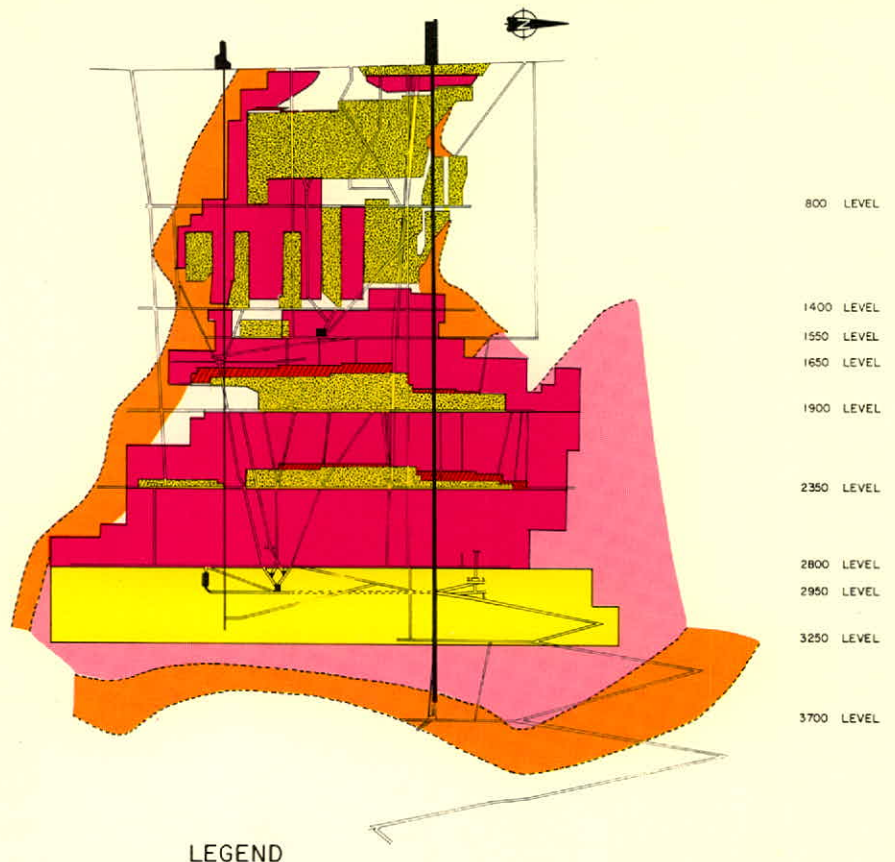
Efficiency in the underground operation improved significantly. Tons per manshift for stoping only were 61.6 in December, compared to 50.9 for the year 1976; the figure for stoping and services was 36.9 tons, compared to 30.0 in 1976.







Zinc recovery improved from 74.9% in 1976 to 80.1% in 1977, mainly as a result of the successful operation of the secondary zinc circuit. A new monthly production record of 44,658 D.S.T. combined zinc and bulk concentrate was set in November.

Recent diamond drilling indicates significant changes in the No. 12 orebodies at depth. The main zone has a strike length of 4,000 feet at 3,400 feet below surface. At the 3700-foot elevation only one intersection over a 10-foot width was encountered. No ore was found in eight drill holes below this elevation. The main zone is still open to the north between the 1400 and 3200-foot elevations.

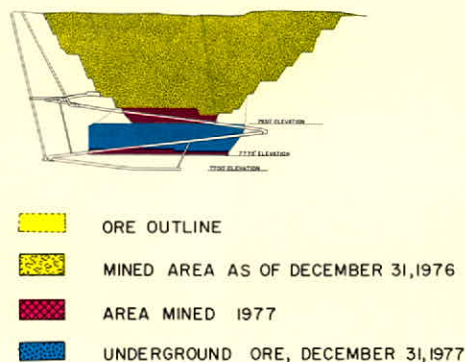
In the west zone, ore occurs over a strike length of 2,000 feet at the 3700-foot elevation. At the 3800-foot elevation, the strike length is 500 feet but no ore was found below this in five drill holes. The west zone is still open to the north between the 1900 and 2800-foot elevations.





### No. 12 MINE SECTION main ore zone



- LEGEND
-  MINED AREA AS OF DEC 31, 1976
  -  AREA MINED IN 1977
  -  PROVEN LEAD ZINC ORE AS OF DEC. 31, 1977
  -  PROBABLE LEAD ZINC ORE AS OF DEC. 31, 1977
  -  INDICATED LEAD ZINC ORE OUTSIDE RESERVES
  -  MASSIVE SULPHIDES BELOW GRADE

### No. 6 MINE SECTION



-  ORE OUTLINE
-  MINED AREA AS OF DECEMBER 31, 1976
-  AREA MINED 1977
-  UNDERGROUND ORE, DECEMBER 31, 1977



Both main and west ore zones appear to have bottomed out but they are still open to the north at the elevations indicated.

The expansion project was cut back in the fourth quarter and it was decided to bottom the No. 3 shaft at the 3700-foot elevation, rather than the originally planned 4500.

At year-end the shaft was excavated to a depth of 3,570 feet below the collar; the concrete placed to 3,576 feet; and the shaft steel installed to 3,250 feet.

A new grinding mill and vacuum pumps were installed in the concentrator as part of the expansion project. A 6,000-ton ore silo and substation at No. 3 shaft was completed. The hoists were installed in the headframe.

At No. 12 Mine, average operating costs decreased from \$20.34 per ton in 1976 to \$19.88 in 1977.

#### NO. 6 MINE

747,000 tons of ore, averaging 4.65% zinc, 1.70% lead, 0.58% copper and 1.79 ounces of silver per ton were produced from the No. 6 Mine and processed through the concentrator.

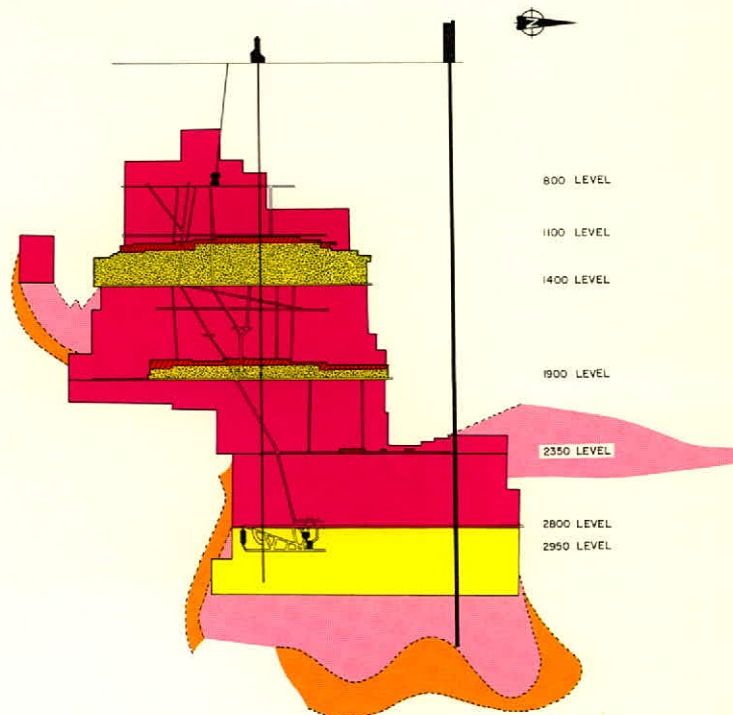
Mining in the pit was completed with one additional bench taken below the pit bottom. Development of the underground operation was completed and regular stoping is underway.

Because underground mining has commenced, operating costs increased from \$12.01 to \$14.10 per ton; however there is higher grade ore underground than in the pit.







#### GENERAL

Following deterioration of market conditions, the number of employees was reduced, through attrition, from 1,653 on June 30 to 1,608 on September 30. In the fall, a layoff of 125 employees became necessary; however, a work-sharing program agreed upon between the company, the union and the federal government, mitigated the effects of the layoff. There were 1,517 employees on the payroll at year-end.

### No. 12 MINE SECTION west ore zone



#### LEGEND

-  MINED AREA AS OF DEC. 31, 1976
-  AREA MINED IN 1977
-  PROVEN LEAD ZINC ORE AS OF DEC. 31, 1977
-  PROBABLE LEAD ZINC ORE AS OF DEC. 31, 1977
-  INDICATED LEAD ZINC ORE OUTSIDE RESERVES
-  MASSIVE SULPHIDES BELOW GRADE



## MINING DIVISION

### PRODUCTION

Ore	Tons	% Zn	% Pb	% Cu	Oz. Ag (per ton)
No. 12 Mine:					
Hoisted	2,537,000	8.79	3.54	0.31	2.72
Crown Pillar	171,000	7.42	3.01	0.32	1.72
No. 6 Mine:					
Hoisted	475,000	4.90	1.80	0.53	1.91
Crown Pillar	272,000	4.21	1.53	0.67	1.58
Total	3,455,000				

### Concentrates

Zinc	390,000	51.9	2.1	0.3	2.5
Bulk	36,000	38.8	15.2	0.6	8.6
Lead	201,000	7.2	31.8	0.9	14.7
Copper	20,000	3.3	6.8	21.9	66.9
Total	647,000				

### Recoveries

Zinc concentrate	75.0				
Bulk concentrate	5.1	5.0			3.6
Lead concentrate		59.2			34.7
Copper concentrate				34.1	15.4
Total recovery	80.1	64.2		34.1	53.7

## DEVELOPMENT

No. 12 Mine	
Drifts and Crosscuts	28,500 feet
Raises	10,475 feet
Diamond Drilling	117,880 feet

## ORE RESERVES

(includes allowance for dilution)

	Tons (000)	% Zn	% Pb	% Cu	Oz. Ag. (per ton)	Total Tonnage (000)	
						1977	1976
<b>Zinc-Lead</b>							
No. 12 Mine							
Proven	70,656	9.15	3.69	0.30	2.78		
Probable	36,411	9.35	3.93	0.35	2.87	107,067	104,894
No. 6 Mine							
Proven	916	7.25	2.62	0.28	2.48	916	1,586
<b>Copper</b>							
No. 12 Mine							
Proven	9,474	1.13	0.40	1.11	0.85		
Probable	4,620	1.57	0.54	1.12	1.39	14,094	14,094

## SMELTING DIVISION

### Production Statistics

		1977	1976	1975
Refined lead	Tons	56,400	51,400	50,900
Silver	Ounces	3,457,900	3,003,600	2,195,000
Copper Matte Speiss	Tons	4,700	3,000	3,500
Sulphuric Acid	Tons	151,900	119,000	139,700



Transfer of molten lead within smelter



Weighing pigs of lead





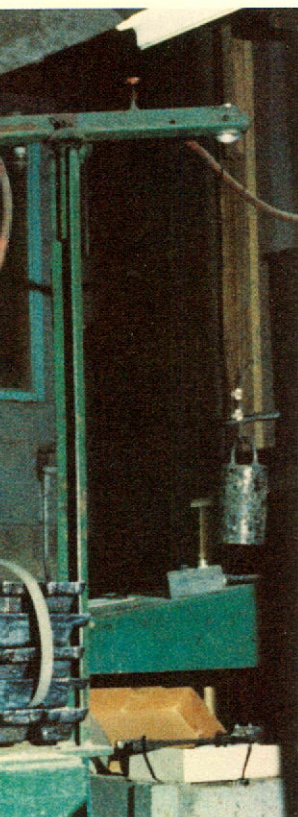
## SMELTING DIVISION

The year 1977 was the most successful ever experienced at the smelter with record production having been achieved. The lead and silver production levels were 10% and 15%, respectively, greater than in 1976. 206,600 tons of concentrate were treated in the smelter compared with 167,000 in 1976. The concentrate stockpile at year-end was 33,000 tons, equivalent to six weeks of operation.

Plant operations were good and the demand for lead was such that the plant operated at maximum levels all year, except for a maintenance shutdown in September.

The new air filtration plant was completed and commissioned at the end of September and has operated very well since. There is every indication that plant "lead in air" levels have dropped and that employee "lead in blood" levels are on a downward trend.

There were seven lost time accidents in the year giving a frequency of 6.2 per million manhours. The work force was reduced by eighteen staff employees. Thirty-five hourly rated employees participated in a work-sharing agreement which involved some of the employees working only 4 days a week with the remaining fifth day being partially paid for by Unemployment Insurance Commission payments.



*Transporting lead concentrate*



*Loading pigs of lead*



**BRUNSWICK  
MINING AND  
SMELTING  
CORPORATION  
LIMITED**

(NO PERSONAL LIABILITY)

(Incorporated under the laws of New Brunswick)

**Consolidated Balance Sheet as at December 31, 1977**

(with comparative figures as at December 31, 1976) (thousands of dollars)

**Assets**

	1977	1976
<i>Current:</i>		
Cash and short-term notes	\$ 12	\$ 11,769
Accounts and settlements receivable —		
Parent and affiliated companies	4,562	3,135
Other trade	18,377	20,831
Inventories of metals and concentrates, at estimated realizable value	43,153	32,135
Prepaid expenses and deposits	626	481
Materials and supplies, at cost	5,024	5,886
	<u>71,754</u>	<u>74,237</u>
<i>Fixed, at cost (note 2):</i>		
Mine buildings, machinery and equipment	105,157	92,039
Smelter buildings, machinery and equipment	84,253	79,198
Employee housing	2,007	1,996
	<u>191,417</u>	<u>173,233</u>
Less accumulated depreciation	89,842	81,784
	<u>101,575</u>	<u>91,449</u>
Mining properties, at cost less amortization	1,408	1,469
Land	991	996
	<u>103,974</u>	<u>93,914</u>
<i>Other assets, at cost less amortization:</i>		
Preproduction (note 2)	17,475	15,031
Deferred development (note 2)	34,270	25,242
Investments in other companies		142
Bond issue expense	1,060	1,106
	<u>52,805</u>	<u>41,521</u>
	<u>\$228,533</u>	<u>\$209,672</u>



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**Liabilities**

	<u>1977</u>	<u>1976</u>
<i>Current:</i>		
Bank indebtedness (note 7)	\$ 19,425	
Accounts payable, advances and accrued liabilities —		
Due to parent and affiliated companies	1,075	\$ 4,486
Other trade	15,219	12,333
Taxes payable	3,484	1,853
Interest accrued	844	844
Current portion of long-term debt	1,151	885
	<u>41,198</u>	<u>20,401</u>
 <i>Taxes provided not currently payable</i>	 <u>24,041</u>	 <u>24,786</u>
 <i>Long-term debt (note 3)</i>	 <u>55,678</u>	 <u>57,552</u>

**Shareholders' equity:**

<i>Capital stock (note 4) —</i>		
Authorized:		
40,000,000 common shares of the par value of \$1 each		
Issued:		
34,267,878 common shares	34,268	34,267
<i>Contributed surplus</i>	57,976	57,976
<i>Retained earnings</i>	15,372	14,690
	<u>107,616</u>	<u>106,933</u>
	<u>\$228,533</u>	<u>\$209,672</u>

On behalf of the Board:

WILLIAM JAMES, Director

ALFRED POWIS, Director

(See accompanying notes)



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**Consolidated Statement of Earnings  
for the Year ended December 31, 1977**

(with comparative figures for the year ended December 31, 1976) (thousands of dollars)

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	<u>1977</u>	<u>1976</u>
<i>Revenue from concentrates and smelter products</i>	\$137,727	\$103,085
Less transportation and outside smelting costs	<u>(18,014)</u>	<u>(14,274)</u>
	119,713	88,811
<i>Expenses:</i>		
Metal production	95,170	67,899
Purchased lead concentrate	10,054	1,223
Interest on long-term debt (note 3)	1,594	1,169
Interest expense (net)	<u>399</u>	<u>199</u>
	107,217	70,490
	<u>12,496</u>	<u>18,321</u>
<i>Depreciation of fixed assets</i>	8,939	8,514
<i>Amortization of preproduction and mining properties</i>	<u>232</u>	<u>232</u>
	9,171	8,746
<i>Income before taxes</i>	<u>3,325</u>	<u>9,575</u>
<i>Taxes:</i>		
Income and production	130	2,034
New Brunswick mining tax royalty	<u>800</u>	<u>          </u>
	930	2,034
<i>Net earnings</i>	<u>\$ 2,395</u>	<u>\$ 7,541</u>
<i>Net earnings per share</i>	<u>7.0c</u>	<u>22.0c</u>

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**Consolidated Statement of Retained Earnings  
for the Year ended December 31, 1977**

(with comparative figures for the year ended December 31, 1976) (thousands of dollars)

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	<u>1977</u>	<u>1976</u>
Retained earnings, beginning of year	\$ 14,690	\$10,576
Net earnings	2,395	7,541
Dividends	<u>(1,713)</u>	<u>(3,427)</u>
Retained earnings, end of year	<u>\$ 15,372</u>	<u>\$ 14,690</u>

(See accompanying notes)

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## Consolidated Statement of Changes in Financial Position for the Year ended December 31, 1977

(with comparative figures for the year ended December 31, 1976) (thousands of dollars)

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	<u>1977</u>	<u>1976</u>
<i>Source of funds:</i>		
Net earnings	\$ 2,395	\$ 7,541
Add (deduct) amounts not requiring an outlay of funds —		
Depreciation and preproduction amortization	9,171	8,746
Deferred development amortization	6,500	2,842
Taxes provided not currently payable	(745)	2,407
Miscellaneous	<u>20</u>	<u>27</u>
Funds derived from operations	17,341	21,563
Issue of 11% General Mortgage Bonds		35,000
Miscellaneous	<u>224</u>	<u>27</u>
 Total funds provided	 <u>17,565</u>	 <u>56,590</u>
<i>Application of funds:</i>		
Additions to fixed assets (net)	19,060	13,078
Deferred development and preproduction (note 2)	18,143	13,446
Current maturities of long-term debt	1,874	2,067
Dividends	1,713	3,427
Bond issue expense	<u>55</u>	<u>900</u>
 Total funds applied	 <u>40,845</u>	 <u>32,918</u>
 Net (decrease) increase in working capital	 (23,280)	 23,672
 Working capital, beginning of year	 <u>53,836</u>	 <u>30,164</u>
 Working capital, end of year	 <u>\$ 30,556</u>	 <u>\$ 53,836</u>

(See accompanying notes)

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## Notes to Consolidated Financial Statements December 31, 1977

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### 1. Accounting policies

#### Consolidation —

The accompanying financial statements are a consolidation of the accounts of the company and its subsidiaries.

#### Translation of foreign currencies —

Accounts receivable or payable in foreign currencies are translated into Canadian dollars at the rate of exchange on the balance sheet date.

#### Inventories —

Inventories of concentrates and metals are valued at estimated realizable value. Supplies are valued at the lower of cost or replacement cost.

#### Deferred development and preproduction costs —

Expenditures for mine development are deferred and then amortized on the basis of tons of ore extracted from the mine. The estimated total cost of developing the mine and the proven and probable tonnage of ore reserves are used in computing the per ton amortization charge to operations. Preproduction costs of major expansion programs are initially capitalized and then amortized on a straight-line basis at 4% per annum.

No amortization of the preproduction and deferred development costs, related to the expansion described in note 2, has been provided in 1977. These assets will be amortized commencing when the facility starts production.

#### Fixed assets —

Fixed assets are valued at cost. Depreciation is provided primarily on a straight-line basis using rates that will charge operations with the cost of these assets over their estimated useful lives. Rates in use are as follows:

Buildings, machinery and equipment	4.5%
Capital spares	10.0%
Tailing dams and equipment	6.5%
Housing	4.5% - 5.0%
Mining properties amortization	4.0%

Those fixed assets related to the expansion project that are in use now (\$9.3 million at December 31, 1977) are being depreciated; depreciation of the remainder will commence when the entire facility starts production.

#### Taxes —

The provision for income and production taxes is computed giving effect to certain permanent and timing differences between reported and taxable income. Current taxes are reduced by items such as earned depletion and other mining allowances. Taxes provided but not currently payable are due to timing differences such as deferred development costs, accelerated depreciation and preproduction costs.

#### Interest expense —

Interest on corporate borrowings applicable to major construction projects is capitalized during the construction period. Discounts on bonds purchased are netted with interest on long-term debt.

#### Revenue —

Concentrates and metals produced are included in inventories and revenue at estimated realizable value when they reach a saleable form.

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## 2. Expansion project and other capital expenditures

The expansion program to increase the capacity of No. 12 mine to 11,000 tons per day was cut back in 1977. Expenditures to date and the estimated total cost of the curtailed program are as follows:

	Total expenditures as at December 31,		Estimated total cost
	1976	1977	
(in thousands of dollars)			
Expansion and development program — Fixed assets (include \$9,300 in use, December 31, 1977)	\$18,100	\$25,000	\$37,700
Preproduction costs	10,100	13,600	15,300
	<u>\$28,200</u>	<u>\$38,600</u>	<u>\$53,000</u>

Accelerated deferred development expenditures in connection with preparation of expanded facilities for production was \$7.3 million for 1977 (\$18.0 million to December 31, 1977). Capitalized interest on corporate borrowings applicable to these major construction projects was \$3.7 million for 1977 (\$6.0 million to December 31, 1977).

Capital expenditures during 1978 are estimated to be \$4.2 million for the expansion and development program, \$0.5 million for deferred development and \$5.0 million for other fixed assets.

## 3. Long-term debt

	Outstanding as at December 31,	
	1977	1976
(thousands of dollars)		
11% General Mortgage Sinking Fund Bonds, Series B due December 1, 1996	\$35,000	\$35,000
5.85% First Mortgage Sinking Fund Bonds, Series A due April 1, 1986	9,937	10,595
7.25% General Mortgage Sinking Fund Bonds, Series A due August 15, 1987	11,714	12,635
6¼% and 6¾% first mortgages to Central Mortgage and Housing Corporation amortized to maturity in 1991	178	207
	<u>56,829</u>	<u>58,437</u>
Current portion	1,151	885
Long-term debt	<u>\$55,678</u>	<u>\$57,552</u>

Long-term debt maturities and sinking fund requirements, excluding the current portion and the amortization of the \$178,000 owing to Central Mortgage and Housing Corporation, are:

1979	—	\$ 2,100,000
1980	—	4,125,000
1981	—	4,225,000
1982	—	4,325,000
Subsequently		40,725,000

To meet sinking fund requirements, bonds in the amount of \$1,579,000 were purchased during the year at a discount of \$190,000, which has been netted with the interest on long-term debt.



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#### **4. Stock options**

In 1977, 300 shares in the company's capital stock were issued under the company's stock option plan. At December 31, 1977, 46,750 common shares had been set aside to cover employees' stock options of which options on 27,250 shares at \$3.49 per share and 4,500 shares at \$5.34 per share were outstanding and may be exercised to February 28, 1982 and September 9, 1986, respectively.

#### **5. Statutory information**

Total remuneration paid or payable in 1977 to directors of the company consisted of directors' fees of \$36,000. Total remuneration of the five highest paid employees of the company (who are not directors or officers) was \$245,600 and pension benefits totalled \$14,250.

#### **6. Comparative figures**

Certain comparative figures for 1976 have been reclassified to follow the 1977 presentation.

#### **7. Bank indebtedness**

Accounts receivable and inventories have been pledged as collateral for the bank indebtedness.

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### **Auditors' Report**

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To the Shareholders of  
Brunswick Mining and Smelting  
Corporation Limited  
(No Personal Liability):

We have examined the consolidated balance sheet of Brunswick Mining and Smelting Corporation Limited (No Personal Liability) as at December 31, 1977 and the consolidated statements of earnings, retained earnings and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these consolidated financial statements present fairly the financial position of the company as at December 31, 1977 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

CLARKSON, GORDON & CO.  
Chartered Accountants

Toronto, Canada,  
February 14, 1978.

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