(NO PERSONAL LIABILITY)





# 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

### ANNUAL MEETING

22 May 1981, 10:30 a.m., (Atlantic Time) at the Mine Office, Bathurst, N.B.

### **DIRECTORS**

E. K. Cork, Toronto, Ont.

Gilbert Finn\*, Moncton, N.B.

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, Senior Vice-President

E. K. Cork, Vice-President — Finance and Treasurer

J. W. Moerman, Vice-President — Mining

A. Young, Vice-President –

Smelting

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, Toronto, Ont.

# COVER -

Rockbolting from muckpile.

# METRICATION

The Canadian mining industry is converting to the International System of Metric Units or "S.I.". The figures in this report are in metric units. A conversion table is shown below.

Metric unit	Symbol	Imperial unit
Tonne	t	2,204.6 pounds
Kilogram	kg	2.2046 pounds
Gram	g	0.03215 troy ounces
Cubic metres	$m^3$	6.2929 barrels



# DIRECTORS' REPORT TO THE SHAREHOLDERS

# Earnings and Dividends

Earnings for 1980 were below expectations. Operations were curtailed by a four-month strike at the mine and a 19-day strike at the smelter. As a result, net earnings declined to \$34.1 million or \$1.01 per share, compared to \$71.3 million or \$2.08 per share in 1979. The return on net assets was 13.1%, significantly less than the 29.5% return in the previous year. Nevertheless, dividends were 90¢ per share, the same as the previous year.

### **Financial Position**

As a result of the low earnings, significant fixed asset additions, new investments and the maintenance of dividends at the 1979 level, working capital declined during each of the first three quarters before increasing modestly in the last quarter. At year-end, working capital was low compared with the last few years but the overall financial position remains strong as shareholders' equity of \$168 million is high in relation to total debt. Working capital should recover to more normal levels following a few quarters of good production.

Despite the strikes, fixed asset expenditures of \$23.7 million exceeded the 1979 figure of \$19.9 million. The 1980 amount includes \$5.1 million spent on the mine expansion project and \$5.0 million on the smelter slag disposal and waste water management facilities. The remainder was made up of a wide variety of smaller projects at both Divisions.

### Investments

Brunswick's 38.2% interest in Frenswick Holdings Limited translates into a 2.9% interest in Noranda Mines Limited. During 1980, Noranda earned \$408 million, or \$4.06 per share. Brunswick's share of Frenswick earnings

amounted to \$13.4 million or 39¢ per share. Brunswick received \$4.0 million in dividends from Frenswick in 1980.

### Metal Markets and Prices

Increased silver prices offset the effects of the strike to some extent since the price for the year averaged US\$20.88 per ounce, compared with the US\$11.12 per ounce in 1979. Mine production, however, was just under 3.5 million ounces compared to 5.25 million ounces in the previous year. In the fourth quarter of 1979, 3.7 million ounces of silver were sold forward as a hedge, of which 2.7 million ounces were to offset 1980 production.

Base metal consumption in the Western Hemisphere declined in 1980 because of widespread economic recession. Nevertheless, the price of zinc metal remained relatively stable through the year. The overseas average producers' price was US\$844 per metric ton. Zinc concentrates are in relatively short supply, with the result that the company will obtain somewhat more favourable terms from the smelters which treat the company's zinc concentrate.

Lead and copper prices did not perform as well. The lead price declined by about one-third during the year to US35¢ a pound at year-end. Copper declined from well over US\$1.00 a pound in the first quarter to US85¢ a pound at the year end.

### Oil and Gas

A total of \$20 million was invested with Dome Petroleum Limited in oil and gas exploration in the Beaufort Sea. The company has a net profits interest in five wells drilled this season as well as a 10% working interest in Kilannak. Initial production

tests in one of these wells, the Tarsuit A-25, flowed 127 cubic metres of oil per day, and Dome is enthusiastic about the reserves indicated.

### **Current Operations**

The expansion program to increase the mining and concentrating capacity to 10,000 tonnes (11,000 tons) per day was delayed by the strike. Only limited activities were possible during this period, and production at the increased rate is now expected to be attained by April 1, 1981, instead of January 1, 1981, as previously scheduled.

During the year the mine continued its program of equipment replacement and modernization to enhance productivity and cost competitiveness. The cost management program, initiated in 1979, continued with satisfactory results. A short-term program -PLUS (Prevent Loss and Unnecessary Spending) involved the entire work-force and resulted in after-tax savings of over \$1 million. Production at the mine was curtailed severely by the four-month strike, and output was limited during October and November by hoisting problems. Nevertheless, employees displayed a positive attitude on their return to work and, once initial production difficulties were overcome, record output levels of over 9,525 tonnes (10,500 short tons) per day were recorded in February of 1981.

The smelter continued to operate during the strike at the mine by making outside purchases of concentrates. However, technical constraints, due to the composition of the purchased concentrates, limited output to 70% of capacity. During this period, numerous repairs and construction projects were completed, and the smelter was able to resume production at normal

levels when the strike at the mine was settled.

### General

Engineering studies on the proposed 100,000 tonnes per year zinc reduction plant indicate that the capital cost for this project will be approximately \$300 million, excluding interest. The company is continuing its discussions with both the Federal and Provincial governments and is now determining if the project can be financed without impairing the financial integrity of the corporation.

Research on improved silver recoveries continued. A process for cyanidation of zinc concentrates was tested and the design of a pilot plant is underway. It appears that capital and operating costs for this process will be high and an increased silver price will be required to make it economic. At the mine, further improvement in concentrator operations increased silver recoveries to 59.8% from 57.8% in 1979.

The mineral exploration program budget in New Brunswick amounted to well over \$2 million in 1980. Activities were concentrated in the vicinity of the company's operations and will continue in 1981 at a similar level.

### Organization

During the year John W. Moerman and Alan Young were appointed Vice-Presidents of the corporation

RETURN ON NET ASSETS

25

20

15

Nine-year average

1972 1973 1974 1975 1976 1977 1978 1979 1980

and Alfred Powis was appointed Senior Vice-President.

### Outlook

The earnings and cash flow from the past two years have enabled Brunswick to invest substantial sums in a variety of projects which will improve operations and enhance profitability in future years. While 1981 may not be as satisfactory a year in terms of prices as 1980, the company will benefit from its mine expansion and the capital replacement programs which should all lead to containing operating costs in the face of runaway inflation. Consequently, Brunswick, as one of the largest and most efficient lead-zinc-silver producers in the world, can look to the future with

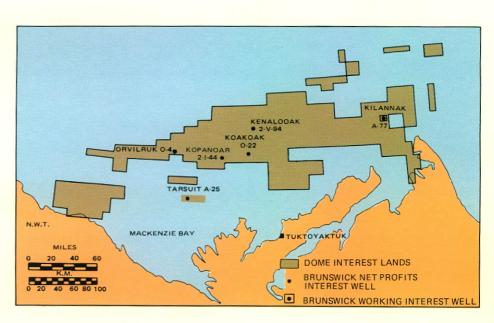
confidence in its ability to compete successfully in international markets.

The staff performed well throughout the year, sometimes under demanding conditions and they have contributed to the strength of the enterprise. The Directors are pleased to express their appreciation for the efforts of these employees.

On behalf of the Board.

WILLIAM JAMES, President.

Toronto, Ontario, 4 March 1981



# **METAL MARKETS**

After a very sharp rise in metal prices during the first quarter and particularly the record levels for silver and gold, prices were generally lower throughout the year, reflecting the uncertain

economic outlook in the USA and elsewhere. In most cases, however, metal inventories remain relatively low and prices could respond rapidly to any general improvement in demand.

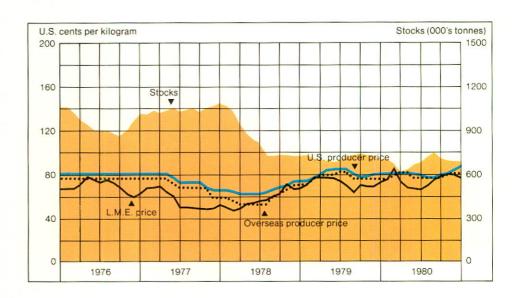
### ZINC

# WESTERN WORLD BALANCE — '000 Tonnes 1978 1979 1980

Supply	4,181	4,675	4,345
Consumption	4,598	4,698	4,399
Stocks	739	717	662

Despite the drop in consumption in 1980, demand for Canadian produced zinc remained strong throughout the year, reflecting in part the closure of two refineries in the USA. Mine production losses due to strikes limited the ability of many foreign zinc plants to increase production and concentrate availability remains the limiting factor on future metal supply.

The overseas producer quotation dropped from US\$845 to \$780 per tonne and then recovered to \$825 in October. The price in the USA fell from US87¢ per kilogram to 78¢ but recovered to 91¢ by year end.

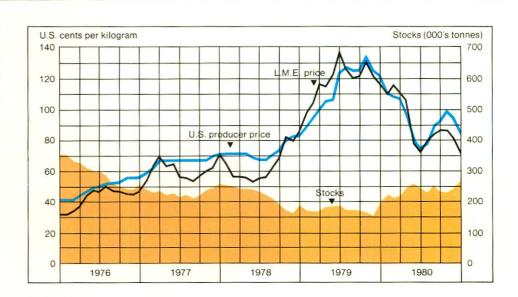


# LEAD

# WESTERN WORLD BALANCE - '000 Tonnes 1978 1979 1980

Supply	3,900	4,145	3,882
Consumption	4,063	4,136	3,814
Stocks	190	200	268

Demand for lead in the USA was down sharply, reflecting a 25% drop in US automobile production. As a result, prices fell steadily during the first half to US75¢ per kilogram. There was a recovery to 99¢ by October but the year-end level was down to 86¢ with further reductions to 66¢ in January.



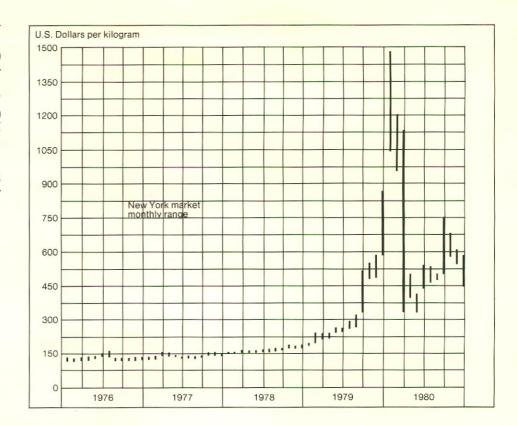
### SILVER

# WESTERN WORLD BALANCE — '000 kilograms 1978 1979 1980

8,180	8,118	8,367
4,821	4,106	7,310
13,001	12,224	15,677
13,499	13,468	12,131
(498)	(1,244)	3,546
	4,821 13,001 13,499	8,180 8,118 4,821 4,106 13,001 12,224 13,499 13,468 (498) (1,244)

The very sharp rise in silver prices in the early part of 1980 led to an abnormal influx of secondary silver to the market, resulting in a substantial surplus of supply over consumption compared to the previous pattern of modest shortages. It could take several years for the market to attain a balanced position as a number of silver's traditional uses have been affected by substitution.

From the peak of US\$1,493 per kilogram in February, the silver price dropped to \$487 at year-end and to \$404 in January of this year.





Development Jumbo on 2350 level

# **OPERATIONS**

#### MINING DIVISION

Operations in 1980 were severely affected by a strike which commenced on May 30 and was settled on September 25. Following the strike, startup difficulties were encountered, which resulted in low production in October and November.

# No. 12 Mine

In 1980, 1,746,000 tonnes of ore were produced from No. 12 Mine. The grade of the millfeed declined from 12.8% in 1979 to 12.5% combined lead and zinc. A record 8,697 tonnes hoisted per calendar day was set in December. Because of the strike, completion of the mine expansion program to 10,000 tonnes per day is now expected by April 1, 1981.

The gyratory crusher serving the new #3 shaft was put into operation in the last quarter of 1980, and should obviate the crushing and hoisting bottleneck. Most of the increased ore production will come from the 2,800 level.

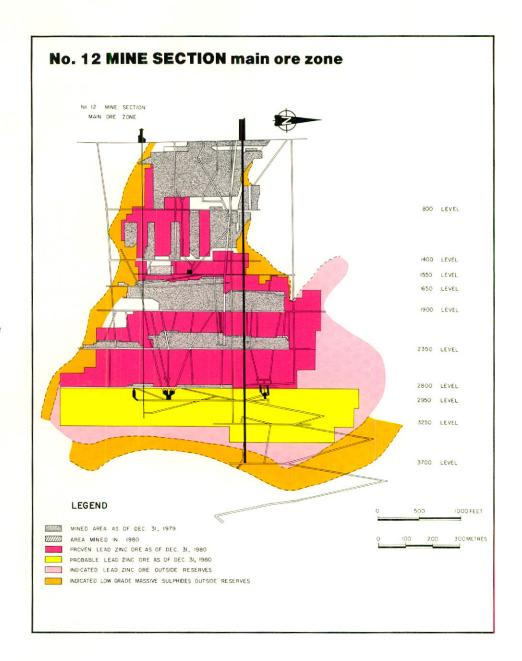
No new areas were developed for ore reserve diamond drilling because of the work stoppage and, as a result, ore reserves changed only slightly. Exploration drifting was later resumed on the 3.250 level.

### No. 6 Mine

Underground production from the No. 6 Mine was 102,000 tonnes of ore. The orebody will be exhausted in 1982, but exploration drifting is taking place to permit drilling under the present underground openings.

#### Concentrator

As a result of process control by computer, new flotation cells, and the decision to produce a lower grade lead concentrate, recoveries of all metals were slightly better than in 1979.



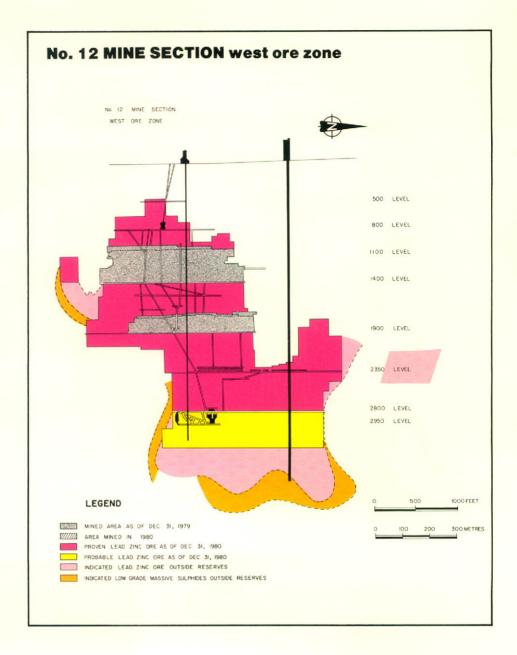
# Exploration

The regional exploration program continued in New Brunswick and more claims were acquired. Expenditures totalled \$2.38 million in 1980, mostly on diamond drilling.

# General

The total number of mine employees increased by 70 to 1,666 as the production capacity was increased and tradesmen were engaged to perform work previously performed by contractors.

Because of the strike and lower tonnage, the cost per tonne milled increased to \$37.77 in 1980. The cost management program was continued. Its highlight was the PLUS (Prevent Loss and Unnecessary Spending) campaign in the fall in which employees identified a net \$1.0 million in revenue adding and cost reduction projects.



### MINING DIVISION

MINE PRODUCTION Ore	Tonnes	% Zn	% Pb	% Cu	g Ag/ tonne
No. 12 Mine:					
Hoisted	1,660,000				
Crown Pillar	86,000				
	1,746,000	8.90	3.61	0.31	99
No. 6 Mine:					
Unde <mark>r</mark> ground	102,000	7.18	2.75	0.31	75
Total	1,848,000	8.80	3.56	0.31	97
Concentrates					
Zinc	226,000	52.0	2.0	0.2	89
Bulk	36,500	34.0	17.3	0.6	312
Lead	133,000	7.3	29.4	0.6	469
Copper	10,300	3.0	8.7	22.4	3,295
	405,800				
Recoveries		% Zn	% Pb	% Cu	% Ag
Zinc		72.2			
Bulk		7.6	9.6		6.3
Lead			59.4		34.6
Copper				40.3	18.9
		79.8	69.0	40.3	59.8

### Metals in Concentrates

Zn	Pb	Cu	Ag
(tonnes)	(tonnes)	(tonnes)	(kilograms)
129,900	45,400	2,300	

# MINERAL RESERVES

(Includes allowance for dilution)

Tonnes	% 7n	% Ph	% Cu	g Ag/		nes (000) 1979
(000)	/0 <b>Z</b> 11	/0 F D	/0 <b>Cu</b>	toille	1300	1919
60,099	9.14	3.70	0.29	96		
39,436	9.21	3.83	0.36	98	99,535	99,008
380	7 12	2.68	0.24	86	380	390
	60,099 39,436	(000) % Zn 60,099 9.14 39,436 9.21	(000) % Zn % Pb 60,099 9.14 3.70 39,436 9.21 3.83	(000) % Zn % Pb % Cu 60,099 9.14 3.70 0.29	(000)         % Zn         % Pb         % Cu         tonne           60,099         9.14         3.70         0.29         96           39,436         9.21         3.83         0.36         98	(000)         % Zn         % Pb         % Cu         tonne         1980           60,099         9.14         3.70         0.29         96           39,436         9.21         3.83         0.36         98         99,535

# DEVELOPMENT

	No. 12 Mine	No. 6 Mine	
Drifts, crosscuts (m)	5,400	484	
Raises (m)	1,900	13	
Diamond drilling (m)	18,500	<del>-</del>	

### **SMELTING DIVISION**

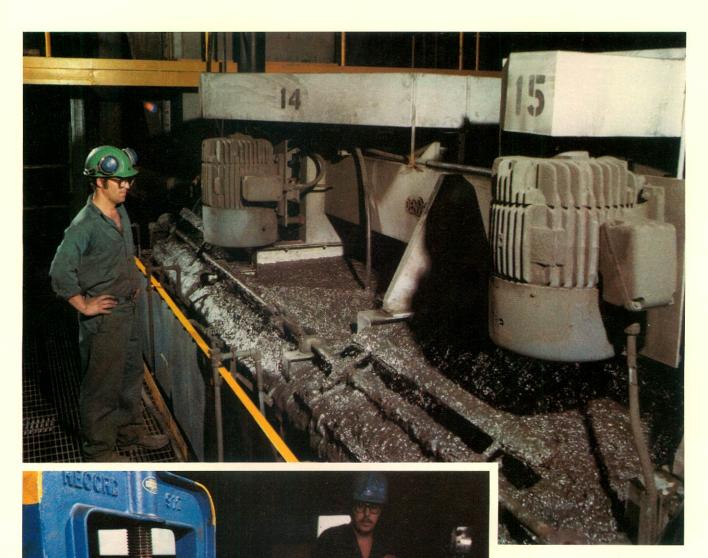
Production was below capacity due to a 19-day strike at the smelter which concluded on June 19th with the signing of a new collective agreement. During the strike at the mine, 43,000 tonnes of lead concentrate were purchased to maintain operations. It was necessary, however, to operate at a reduced capacity of 70% during this period to permit the blending of the different concentrates.

Extensive repairs and modifications were carried out at the plant in the period immediately following the employees' return to work. Major construction projects completed during the year were the building of the bismuth crystal plant, the water treatment plant and the modified slag handling facility. The company expects to be able to meet government regulations relating to contaminants in the plant effluent.

Plant hygiene statistics for the year indicated that the efforts underway to improve the plant environment are successful.

The Smelting Division was again awarded the New Brunswick Mining Association Award for its safety record last year.

Production						
Year	Lead Tonnes	Silver Kilograms	Acid Tonnes			
1980	44,900	94,646	143,200			
1979	56,800	96,325	178,200			
1978	60,700	114,085	167,800			
1977	51,200	107,554	138,000			
1976	46,600	93,433	108,200			



Flotation cells



Air cylinder repair shop



Main office, Mining Division



No. 3 headframe control room

# Statement of Earnings

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

	1980	1979 (Restated
Revenue from concentrates and smelter products Less transportation and outside smelting costs	\$ 234,594 (18,251)	- note 2) \$ 287,662 (30,099)
	216,343	257,563
Expenses: Production costs Purchased lead concentrates and residues Oil, gas and mineral exploration Depreciation and amortization Interest on long-term debt (note 5)	113,091 42,437 5,579 14,595 2,323 178,025 38,318	119,217 1,982 12,942 11,570 1,250 146,961 110,602
Interest income (expense), net	(2,976)	3,836
Earnings before the following	35,342	114,438
Taxes: Income and production taxes New Brunswick mining tax royalty	12,500 2,100 14,600 20,742	41,700 3,700 45,400 69,038
Share of earnings of associated company	13,382	2,305
Net earnings	\$ 34,124	\$ 71,343
Net earnings per share	\$1.01	\$2.08

# Statement of Retained Earnings for the Year ended December 31, 1980 (with comparative figures for the year ended December 31, 1979) (thousands of dollars)

	1980	1979
Retained earnings, beginning of year: As previously reported Adjustment arising from change in basis of	\$ 77,407	\$ 37,559
accounting for preproduction and deferred development expenditures, net of tax (note 2)	(3,837)	(4,636)
As restated	73,570	32,923
Net earnings	34,124	71,343
Dividends (note 8)	(30,478)	(30,696)
Retained earnings, end of year	\$ 77,216	\$ 73,570

(See accompanying notes)

# **BRUNSWICK** MINING AND **SMELTING** CORPORATION LIMITED

(NO PERSONAL LIABILITY)

(Incorporated under the laws of New Brunswick)

# BRUNSWICK MINING AND **SMELTING** CORPORATION LIMITED

(NO PERSONAL LIABILITY)

(Incorporated under the laws of New Brunswick)

# Balance Sheet as at December 31, 1980 (with comparative figures as at December 31, 1979) (thousands of dollars)

ASSETS	1980	1979
		(Restated – note 2)
Current:		
Accounts and settlements receivable — Parent and affiliated companies Other trade	\$ 4,292 24,056	\$ 7,922 40,281
Margin deposits		61,234
Inventories of metals and concentrates, at estimated realizable value  Materials, supplies and prepaid expenses	44,807 9,869	47,690 5,183
Materials, supplies and prepaid expenses		
	83,024	162,310
Investment in associated company (note 3)	71,860	48,297
Fixed, at cost:		
Mine buildings, machinery and equipment	141,962	127,904
Smelter buildings, machinery and equipment	98,271	88,986
	240,233	216,890
Less accumulated depreciation	119,919	107,570
	120,314	109,320
Mining properties, at cost less amortization,		
and land	2,220	2,276
	122,534	111,596
Other assets (note 4)	61,330	44,441
	\$338,748	\$366,644

On behalf of the Board: WILLIAM JAMES, Director ALFRED POWIS, Director

(See accompanying notes)

#### LIABILITIES AND SHAREHOLDERS' EQUITY 1979 1980 (Restated note 2) Current: Bank indebtedness \$ 35.805 \$ 60,474 Accounts payable and accrued liabilities -Parent and affiliated companies 5.969 2.441 Other trade 17,297 18.716 Taxes payable 11,683 25,405 70.754 107,036 Taxes provided not currenty payable 71,793 64,642 28,216 31,827 Long-term debt (note 5) Shareholders' equity: Capital stock (note 6) 34.533 34,403 Contributed surplus (note 7) 59.397 58.722 Retained earnings 77.216 73.570 171,146 166,695 Less the company's pro rata interest in its shares held through associated company (3.161)(3.556)167,985 163.139 \$338.748 \$366.644

# **AUDITORS' REPORT**

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

We have examined the balance sheet of Brunswick Mining and Smelting Corporation Limited (No Personal Liability) as at December 31, 1980 and the statements of earnings, retained earnings and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these financial statements present fairly the financial position of the company as at December 31, 1980 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied, after giving retroactive effect to the change in the method of accounting for preproduction and deferred development expenditures as explained in note 2 to the financial statements, on a basis consistent with that of the preceding year.

CLARKSON GORDON Chartered Accountants

> Toronto, Canada February 19, 1981.

# Statement of Changes in Financial Position for the Year ended December 31, 1980 (with comparative figures for the year ended December 31, 1979) (thousands of dollars)

	1980	1979 (Restated – note 2)
Source of funds:  Net earnings  Add (deduct) amounts not requiring an outlay of funds —	\$ 34,124	\$ 71,343
Depreciation and amortization	14,595	11,570
Taxes provided not currently payable Share of earnings less dividends of	7,151	29,434
associated company	(9,409)	(1,634)
Funds derived from operations	46,461	110,713
Issue of shares	805	779
Total funds provided	47,266	111,492
Use of funds: Additions to fixed assets (net)	23,713	19,869
Deferred development expenditures	1,909 16,800	2,526 490
Oil and gas expenditures Investment in associated company	13,172	50,000
Reduction of long-term debt	3,611	21,442
Dividends	31,065	30,915
Total funds used	90,270	125,242
Net decrease in working capital	(43,004)	(13,750)
Working capital, beginning of year	55,274	69,024
Working capital, end of year	\$ 12,270	\$ 55,274

(See accompanying notes)

# Notes to Financial Statements December 31, 1980

# 1. Accounting policies

These financial statements are prepared in accordance with accounting principles generally accepted in Canada.

### 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. Foreign exchange gains and losses are included in income.

### Inventories -

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

### Investment in associated company -

The investment in Frenswick Holdings Limited is accounted for by the equity method. Under this method, the company takes into earnings and reflects in the investment account its share of the earnings or loss of Frenswick, after the elimination of reciprocal interests. Dividends received are credited to the investment account.

### Fixed assets -

Fixed assets are valued at cost. Depreciation and amortization are 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 and fixed machinery	
and equipment	4.5%
Mobile equipment	14.0% - 30.0%
Capital spares	10.0%
Tailing dams and equipment	6.5%
Housing	4.5% - 5.0%
Mining properties	4.0%

### Deferred development expenditures -

Development expenditures are deferred until the appropriate area of the mine comes into service, and then are amortized on a straight-line basis over 25 years (see note 2).

### Exploration expenditures -

Oil, gas and mineral exploration expenditures are charged against current earnings unless they relate to properties for which the results of drilling have not been evaluated or from which production is reasonably certain, in which cases they are deferred. At the time of evaluation, deferred costs associated with unsuccessful drilling efforts will be charged against earnings. Deferred costs associated with successful efforts (recoverable reserves proven to exist) will be amortized on the unit-of-production method.

### Taxes -

The company provides for income and production taxes by the tax allocation method. Under this method, timing

differences between reported and taxable income (related primarily to claiming capital cost allowances, deferred development and exploration expenses for tax purposes in excess of amounts written off in the accounts) result in the provision for taxes which are not currently payable.

Federal investment tax credits are recognized as a reduction in the provision for income taxes in the years in which such credits are claimed for tax purposes.

### Revenue -

Concentrates and metals produced are included in inventories and revenue when they reach saleable forms at estimated realizable values.

### Interest expense -

Interest on corporate borrowing applicable to major construction projects is capitalized during the construction period. Discounts on bonds repurchased are deducted from interest on long-term debt.

# 2. Change in accounting policy

During the year, the company changed its accounting policy for preproduction and deferred development expenditures.

Prior to 1980:

- expenditures related to sinking the new shaft were classified as preproduction and expenditures related to development around the shaft were classified as deferred development;
- (ii) expenditures related to normal development of working places were classified as deferred development;
- (iii) both the preproduction and deferred development expenditures were amortized through a per ton charge based on the estimated total cost of developing the mine and the proven and probable ore reserves.

Under the new policy:

- (i) the total expenditures associated with sinking the new shaft and related development around the shaft are classified as deferred development;
- (ii) deferred development expenditures are being amortized on a straight-line basis over 25 years;
- expenditures relating to the normal development of working places are included in operating costs for the year.

This change has been given retroactive application in the accounts with the following effect upon previously reported earnings and retained earnings:

	Retained earnings at end of 1979	1979 Net earnings	Retained earnings at end of 1978
	(the	ousands of dollars	s)
Balance previously reported	\$77,407	\$70,544	\$37,559
Increase (decrease) arising from: Difference between normal development expenditures incurred and amortized Less income and production taxes	(8,855) 4,357 (4,498)	271 (133) 138	(9,126) 4,490 (4,636)
Reduction in amortization upon change to straight-line method Less income and production taxes	1,328 (667) 661	1,328 (667) 661	
Total adjustments Balance as restated	(3,837)	799 \$71,343	(4,636) \$32,923

The 1979 comparative figures have been restated to include the effects of the above change. 1980 earnings are \$843,000 higher than they would have been without this change in policy.

### 3. Investment in associated company

The company purchased 38.2% of the common shares of Frenswick Holdings Limited in 1979 and 1980 for \$63,172,000 cash. These shares have been pledged as collateral for the company's bank indebtedness. Frenswick owns a 36.3% interest in the common shares of Zinor Holdings Limited, the principal asset of which is a 21.2% interest in the common shares of the company's parent, Noranda Mines Limited.

Because of the reciprocal shareholdings that resulted from the Frenswick purchase, part of the purchase price is deemed for accounting purposes to be a repurchase by the company of an interest in its own shares and accordingly each of the number of shares issued, the dollar amount of shareholders' equity, earnings per share, and dividends paid have been reduced to reflect the company's pro rata interest in its own shares, as shown in notes 6 and 8.

### 4. Other assets

	As at Dece	ember 31
	1980	1979
	(4)	(Restated – note 2)
	(thousands	of dollars)
Deferred development expenditures, at cost less amortization	\$43.513	\$43,412
Bond issue expense, at cost less amortization	527	539
Interest in frontier area oil and gas drilling programs	17,290	490
	\$61,330	\$44,441

# 5. Long-term debt

	Outstanding as at December 31			
	1980 1979			
	(thousands of dollar			
<ul> <li>11% General Mortgage Sinking Fund Bonds, Series B due December 1, 1996</li> <li>5.85% First Mortgage Sinking Fund Bonds, Series A due April 1, 1986</li> <li>7.25% General Mortgage Sinking</li> </ul>	\$ 17,349 4,579	\$17,434 7,254		
Fund Bonds, Series A due August 15, 1987 61/4% and 63/4% first mortgages	6,175 113	7,008 131		
Long-term debt	\$ 28,216	\$31,827		

All maturities and sinking fund requirements for 1981 and 1982 have been satisfied at the end of 1980.

Remaining long-term debt maturities and sinking fund requirements are:

1983	\$ 1,754,000
1984	2,618,000
1985	2,718,000
Subsequently	21,126,000

Bonds in the amount of \$3,593,000 were repurchased during the year at a discount of \$480,000, which has been deducted from interest on long-term debt.

### 6. Capital stock

(a) Authorized capital -

The authorized capital consists of 40,000,000 common shares of the par value of \$1 each.

### (b) Issued capital -

The issued capital stock is summarized below:

	1980	1979
Shares issued at beginning of year Issued under stock option plan	34,402,620	34,288,228
(note 6(c)) Issued as performance bonus	130,628	93,312 21,080
Shares issued at end of year Less pro rata interest in	34,533,248	34,402,620
shares (note 3)	(650,606)	(728,991)
Net shares	33,882,642	33,673,629

### (c) Stock option plan -

In 1980, 130,628 shares in the company's capital stock were issued under the company's stock option plan for \$805,000. At December 31, 1980, 147,460 common shares had been set aside to cover employees' stock options, of which the following were outstanding:

Year granted	No. of shares	Normal expiry date	Option price per share
1972	8,250	Feb. 28, 1982	\$3.49
1976	1,500	Sept. 9, 1986	5.34
1979	61,160	Feb. 21, 1989	6.76
1979	27,600	May 16, 1989	6.11
	98,510		

### (d) Earnings per share -

The earnings per share calculations for 1979 and 1980 have been based on the weighted average number of shares outstanding after deduction of the pro rata interest.

# 7. Contributed surplus

As a result of the issue of 130,628 shares at values in excess of par, \$675,000 have been added to contributed surplus in 1980 (\$665,000 in 1979).

### 8. Dividends

Dividends declared and paid were as follows:

	1980	1979
	(thousands	of dollars)
1980 and 1979 — \$0.90 per share Less pro rata share of dividends	\$ 31,065	
(note 3)	(587)	(219)
Net charge to retained earnings	\$ 30,478	\$ 30,696

# 9. Related party transactions

During the year, the company had business transactions with its parent company, Noranda Mines Limited, and with certain of Noranda's subsidiary and associated companies. Transactions related to the purchase, sale and processing of mining and metallurgical products (including applicable purchase and sales commissions) were effected at rates set out in various contractual agreements between the parties. such agreements being similar to those commonly used in the industry. Purchases of operating supplies were at normal market prices. Charges for management, data processing, research, exploration and other services were at rates which closely reflect the actual cost of providing the services. Interest charges and revenues arising from the company's participation with Noranda and its subsidiary and associated companies in a short term investment pool were at market rates.

Details of 1980 transactions are as follows:

	of dollars)
Purchases of concentrates and residues	\$17,003
Sales of products	18,900
Smelting and refining tolls	4,091
Commissions	1,209
Purchases of operating supplies	3,357
Charges for services	2,597
Interest expense (net)	1,335

At December 31, 1980, Noranda held \$968,000 of the company's 7.25% General Mortgage Sinking Fund Bonds, Series A due August 15, 1987.

At December 31, 1980, the amounts indicated on the accompanying balance sheet as receivable from and payable to parent and affiliated companies result from the above transactions, and are current and normal under the terms of the various agreements.

### 10. Segmented information and export sales

The company conducts mining and metallurgical operations and its plant facilities are all located in the Province of New Brunswick.

Export sales amounted to \$170,181,000 in 1980 and \$210,267,000 in 1979.

# 11. 1981 capital expenditures

Capital expenditures during 1981 are estimated to be \$37,600,000.

#### 12. Income taxes

At December 31, 1980 unutilized investment tax credits amounted to approximately \$7,500,000.

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# NINE YEAR FINANCIAL SUMMARY

The summary on the opposite page gives highlights of the company's financial history during the nine year period subsequent to the operational and capitalization changes made at the end of 1971.

#### Distribution of Revenue

This table shows the distribution through the economy of the revenues generated by the company's productive activity. The revenues are governed by production volumes (which the company can usually control) and prevailing international metal prices and foreign exchange rates (over which the company has no control). Net earnings are the residual amount after contracted or legislated obligations to employees, suppliers, lenders and governments have been satisfied and after a provision has been made to recover the original cost of productive assets over their useful lives. Net earnings are volatile as metal markets are traditionally cyclical in nature.

#### **Financial Position**

Net assets represent the permanent investment in the business on which a return must be earned irrespective of financing sources. The company's capital base has increased steadily in every year (despite the unsatisfactory earnings in some years) because capital reinvestment has exceeded depreciation and because operating working capital has grown as a result of inflation and higher production volumes. The lower half of the table shows how the net assets have been financed.

### Rate of Return on Net Assets

This percentage is a key measurement of performance since it relates the earnings to the capital base and can be compared with returns in other businesses. As with the net earnings, the rate of return is volatile and cyclical. It has averaged 11% over the nine year period. High rates of return are necessary in the good years to compensate for the lower rates which have been and will be experienced during the bad years of the price cycle.

### Cash Flow and Reinvestment

The annual Statement of Changes in Financial Position highlights the movements in working capital and does not specifically deal with the generation of cash. The table opposite recognizes that operating working capital is part of the permanent investment in the business and is not available for new investment or distribution to shareholders. The short term and long term financing activities are grouped together to demonstrate that the incurring or repayment of debt is merely a bridge between the cash generated and the end use of that cash.

The cumulative column shows that cash reinvested in the business is 134% of net earnings. Dividends represent 43% of net earnings and only 24% of cash available. 76% of the cash available for distribution or new investment has been reinvested in the business.

# NINE YEAR FINANCIAL SUMMARY (\$ in millions)

		1980	1979	1978	1977	1976	1975	1974	1973	1972
DISTRIBUTION OF REVENUE										
Revenue from production		\$234.6	\$287.7	\$189.6	\$137.7	\$103.1	\$121.3	\$100.0	\$ 79.0	\$ 59.0
Wages, salaries and benefits		46.9		39.2	40.8	30.7	31.7	20.3	17.2	14.9
Energy, supplies and services Transportation and by-product smeltin	a coete	112.8 18.3	86.8 30.1	59.7 22.8	62.3 18.0	38.9 14.3	42.4 15.9	28.3 15.0	22.6	26.7
Depreciation and amortization	y cosis	14.6	11.6	9.8	9.6	8.8	8.8	7.9	13.2	6.6 7.6
Interest expense (income)		5.3			2.0	1.4			2.7	3.0
Provincial sales, property and business	s taxes	1.4	1.5	1.1	1.1	0.9	0.9	0.4	0.3	0.3
Income and production taxes Share of associated company earnings		14.6 (13.4		27.8	1.2	1.3		10.3	5.9	0.3
Share of associated company earning	•	200.5		161.8	135.0	96.3	109.8	83.4	70.0	59.4
Net earnings (loss)		\$ 34.1		\$ 27.8	\$ 2.7				10,000,000,000	\$ (0.4)
FINANCIAL POSITION — YEAR ENI	)									
Net assets consisted of:	2									
Operating working capital		\$ 48.1	\$ 54.5	\$ 70.5	\$ 51.1	\$ 43.0	\$ 40.6	\$ 26.4	\$ 25.5	\$ 20.0
Investment in associated company		71.9	48.3	(All and Andreas	_	=	=	_		
Fixed assets (net) Other assets (net)		122.5 61.3	111.6	102.0	104.0	93.9	89.4	85.2	84.0	86.5
Other assets (flet)		303.8	258.8	<u>42.7</u> 215.2	39.4	27.4	17.5	8.8	6.9	7.9
E		= 303.8	256.6	====	194.5	164.3	147.5	120.4	116.4	114.4
Financed by:		05.0	(0.7		00.0	(100		(0.0		40.5
Short-term debt less cash* Long-term debt		35.8 28.2	(0.7)	53.3	20.6 55.7	(10.9) 57.6	) 10.4 24.6	(6.3) 26.4	9.9	13.5 34.8
Shareholders' equity		168.0	163.1	125.3	100.8	99.8	96.4	88.4	75.2	66.1
Taxes provided not currently payable	е	71.8	64.6	35.2	17.4	17.8	16.1	11.9	3.2	
*and margin deposits in 1979		\$303.8	\$258.8	\$215.2	\$194.5	\$164.3	\$147.5	\$120.4	\$116.4	\$114.4
RATE OF RETURN ON NET ASSETS  Net earnings exclusive of interest income or expense (ned divided by average of opening and closing net assets		13.1	29.5	13.9	2.1	4.8	9.0	14.5	9.0	1.2
CASH FLOW AND REINVESTMENT										
Net earnings (loss)	\$179.4	\$ 34.1	\$ 71.3	\$ 27.8	\$ 2.7	\$ 68	\$ 11.5	\$ 16.6	\$ 9.0	\$ (0.4)
Depreciation and amortization	86.8	14.6	11.6	9.8	9.6	8.8	8.8	7.9	8.1	7.6
Taxes provided not currently payable	71.8	7.2	29.4	17.8	(0.4)	1.7	4.2	8.7	3.2	-
Associated company earnings less dividends	(11.0)	(9.4)	(1.6)							
Decrease (increase) in operating	(11.0)	(3.4)	(1.0)		_	_	_	_		-
working capital	(48.6)		16.0	(19.4)	(8.1)	(2.4)		(0.9)	(5.5)	(20.5)
Other (net)	22.5	0.9	0.7	0.3	0.1	(0.9)		0.2	0.6	20.4
Cash generated Borrowings (reduction in)	300.9 16.8	53.8	127.4 (23.6)	36.3 (21.6)	3.9 29.6	14.0	10.5 14.9	32.5 (17.9)	15.4 (10.3)	7.1 1.1
Cash available	\$317.7			\$ 14.7			\$ 25.4		\$ 5.1	TO SOME
Used as follows:										
Fixed assets and deferred										
development	\$159.9			\$ 11.3	\$ 31.8	\$ 22.3	\$ 22.0	\$ 11.2	\$ 5.1	\$ 8.2
Investment in associated company Oil and gas drilling expenditures	63.2 17.3	13.2 16.8	50.0	-	-	=	-	· ·	_	_
Total reinvested	240.4	55.6	72.9	11.3	31.8	22.3	22.0		5.1	
Dividends	77.3	31.1	30.9	3.4	1.7	3.4	3.4	11.2	5.1	8.2
								\$ 14.6		\$ 8.2
PER SHARE DATA — \$										
Net earnings		1.01	2.08	0.81	0.08	0.20	0.33	0.48	0.26	_
Dividends		0.90	0.90	0.10	0.05	0.10	0.10	0.10		V <u>-</u>
Market price range – High		18.38	11.50	5.75	6.12	6.50	4.70	5.87	6.50	4.60
<ul><li>Low</li><li>Book Value — Average</li></ul>		9.38	5.38 4.21	2.71 3.30	3.00 2.93	3.85 2.86	3.50 2.70	3.30 2.39	3.70 2.06	2.53 1.94
	50.74 • 5 • 50.01 • 6 • 50.00			0.00		2.00	2.70	2.00	2.00	1.54

Note: Data for the years 1979 and earlier have been restated to give retroactive effect to the accounting policy change for preproduction and deferred development expenditures made during 1980.

### EFFECTS OF INFLATION

Inflation is the abnormal increase in currency which results in the decline in the purchasing power of money.

The Canadian economy continues to experience a high level of inflation. For the wage or salary earner, the impact of inflation is all too evident on a daily basis. For a business, particularly one in a cyclical industry, the effects of inflation are just as real, but are less easy to measure. The effects of inflation on the long term financial strength of the Company are a major concern to management and must be considered in evaluating the financial results for the year and in making investment decisions.

The statement below which incorporates three adjustments (inventories, long term assets and financing) has been prepared in accordance with a format which has gained some acceptance in Canada over the past few years. The adjustments are based on a Statistics Canada index that is available to all companies.

Funds derived from operations (from statement of changes in financial position)		\$ 46,000,000
from this, deduct the funds required to finance original cost of productive assets (historical cost depreciation and amortization)		15,000,000
leaving this amount available, on an historical accounting basis, for distribution to shareholders or for expansion		31,000,000
but to take account of the increased cost of maintaining operating capacity in our inflationary environment, the following funds should also be deducted:		
to replace inventories at higher prices for fixed assets and development at higher prices	\$ 2,000,000 16,000,000 18,000,000	
partly offsetting these requirements, additional funds may be available from borrowing if present debt-equity ratio is maintained	2,000,000	16,000,000
which leaves the funds available from the year's operations for distribution to shareholders or investment in expansion of activities		\$ 15,000,000

The statement suggests that of the \$46 million generated in 1980, \$33 million (\$15 million plus \$18 million) should have been spent to maintain the business, given the level of inflation Canada has been experiencing, of which \$2 million could be borrowed. This would have left \$15 million to distribute to shareholders or to spend on growth, assuming no change in the debt-equity ratio.

The actual experience of 1980 was that \$14 million was spent to maintain the business, \$34 million was spent to expand the business, and \$31 million was paid as dividends. \$33 million of borrowings helped to pay for these outlays.

Thus, by this measure, the company fell short of investing the \$33 million required to maintain the business and must be prepared to make up the extra \$19 million in future years. Expansion expenditures and dividends totalled \$65 million, which is well in excess of the \$15 million theoretically available. The debt to equity ratio was increased as a result of the borrowings necessary to finance these expenditures.

It should be noted that the \$16 million shown in the statement could be interpreted as being the approximate amount by which the company's 1980 earnings were overstated due to the effect of inflation on costs.

It must be emphasized that this statement is intended to provide perspective and involves many statistical estimates. There is also concern that it may understate the full impact of inflation since the Statistics Canada index used does not fully reflect the escalation that has taken place in the replacement cost of fixed assets.

