

Annual Report 1981

**brenda**

**Brenda Mines Ltd.**



# BRENDA MINES LTD.

P.O. Box 420, Peachland, B.C.

## NOTICE OF THE ANNUAL GENERAL MEETING

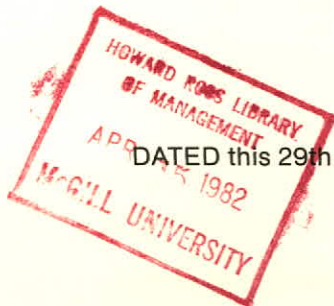
NOTICE IS HEREBY GIVEN that the Annual General Meeting of BRENDA MINES LTD. (the Company) will be held in Room No. 231, Hotel Vancouver, Vancouver, British Columbia, on Wednesday, the 5th day of May, 1982 at the hour of 11:00 o'clock in the forenoon, Vancouver time, for the following purposes:

1. To receive the Financial Statements of the Company for the year 1981 and the report of the Auditors thereon;
2. To elect Directors;
3. To appoint Auditors and authorize the Directors to fix their remuneration.

If you are unable to attend the Meeting, kindly sign and return the form of proxy accompanying this Notice. A proxy to be valid must be deposited at the office of Canada Permanent Trust Company, 701 W. Georgia St., Vancouver, B.C. at or before the hour of 11:00 o'clock in the forenoon, Vancouver time, on the 3rd day of May, 1982.

By Order of the Board,

B. H. GROSE,  
Secretary.



DATED this 29th day of March, 1982.

# BRENDA MINES LTD.

P.O. Box 420, Peachland, B.C.

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## INFORMATION CIRCULAR

**As at March 29, 1982**

### REVOCABILITY OF PROXY

A member giving a proxy has the power to revoke it in any manner permitted by law.

### PERSONS MAKING THE SOLICITATION

The solicitation is made by the management of the Company in respect of the Annual General Meeting called for the 5th day of May, 1982 and the cost of which will be borne by the Company.

### VOTING SHARES AND PRINCIPAL HOLDERS THEREOF

There are 4,282,000 common shares of the Company without nominal or par value outstanding, each of which entitles the holder to one vote for each share held at all Meetings of Shareholders. Only Shareholders of record on the date of mailing of the Notice will be entitled to vote at the Meeting.

A proxy to be valid must be deposited at the office of the Canada Permanent Trust Company, 701 W. Georgia St., Vancouver, British Columbia at or before the hour of 11:00 o'clock in the forenoon, Vancouver time, on the 3rd day of May, 1982.

If the instructions contained in a Form of Proxy are certain, the shares represented by the Proxy shall be voted on any poll and, where a choice is specified, the shares shall be voted on any poll in accordance with the specifications so made. **If no choice is specified in a proxy, the shares represented thereby shall be voted in favour of all matters referred to therein.**

The proxy confers discretionary authority with respect to amendments or variations to matters identified in the Notice of Meeting, and other matters which may properly come before the Meeting.

Noranda Mines Limited owns beneficially, directly or indirectly, 2,177,900 shares in the capital stock of the Company, and this represents 50.9% of the outstanding shares of the Company.

### APPOINTMENT OF PROXIES

**A member has the right to appoint a person, who need not be a member, to attend and act for him on his behalf at the Meeting, other than the persons designated in the form of proxy, and may do so by inserting such other person's name in the blank space provided in the form of proxy.**

## ELECTION OF DIRECTORS

(a) The term of office of each Director of the Company will expire at the next Annual General Meeting of the Company, unless sooner terminated.

The nominees proposed by Management are listed below. The persons named are the present Directors of the Company.

In the event any nominee is not available to act as a Director, a substitute will be nominated.

Proposed Nominee	Principal Occupation	Director Since	Number of Shares Owned
William Allan Director — Canada	Vice-President — Mines, B.C. Noranda Mines Limited since September, 1981 and prior to that General Manager, Noranda Lakeshore Mines from July 1979 and Mine Manager, Matabi Mines Limited from March, 1976	—	Nil
Bernard O. Brynelsen Chairman of the Board and Director — Canada	President Norancon Exploration Limited (Exploration)	1956	37,028
* John A. Hall President and Director — Canada	Senior Vice-President — Mines, Noranda Mines Limited	1969	Nil
John B. Knapp Vice-President & General Manager — Mining Operations — Canada	Vice-President & General Manager — Mining Operations. Brenda Mines Ltd.	1979	Nil
* Morris M. Menzies Director — Canada	Geological Engineer	1965	82
Gordon H. Montgomery Director — Canada	Executive Vice-President, Westmin Resources Limited (Natural Resource, exploration and production)	1974	500
Alfred Powis Director — Canada	Chairman & President, Noranda Mines Limited	1968	Nil
* Horace B. Simpson Director — Canada	Vice-President, Okanagan Holdings Ltd. (Property development and management)	1973	1,000
* H. Richard Whittall Director — Canada	Partner, Richardson Securities of Canada (Investment Dealers)	1973	Nil

\* Members of the Audit Committee

The information as to shares beneficially owned, not being within the knowledge of the Company, has been furnished by the respective nominees.

(b) Advance Notice of the Meeting was published in Vancouver on the 5th day of March, 1982.

## REMUNERATION OF DIRECTORS AND SENIOR OFFICERS

The aggregate direct remuneration paid by the Company in the last completed financial year to the Directors and Senior Officers of the Company amounted to \$314,242.

The estimated aggregate cost to the Company in the last completed financial year of all pension benefits proposed to be paid to the Senior Officers of the Company under the existing pension plan in the event of retirement at normal retirement age was \$12,000.

## APPOINTMENT OF AUDITORS

It is intended to appoint Clarkson Gordon as auditors of the Company. Clarkson Gordon were first appointed auditors of the Company at the Annual General Meeting held in June 1981.

## MANAGEMENT CONTRACT

(a) By agreement dated April 18, 1968, the Company appointed Noranda Mines Limited, P.O. Box 45, Commerce Court West, Toronto, Ontario, as Manager and Supervisor of the business and operations of the Company, to have effect from January 1, 1968, such management and supervision to always be subject to general directions from the Company's Board of Directors. The agreement is to remain in force and effect from year to year unless and until terminated by either party on not less than twelve (12) months' written notice.

(b) The names and addresses of the insiders of Noranda Mines Limited are: Wm. Allan, P.O. Box 12524, 1500 - 1066 West Hastings Street, Vancouver, British Columbia; J. L. Cockwell, Suite 4800, Commerce Court West, Toronto, Ontario; J. C. Dudley, 3701 - 521 Fifth Avenue, New York, N.Y., U.S.A.; J. T. Eyton, Q.C., Suite 4800, Commerce Court West, Toronto, Ontario; Brian M. Flemming, Q.C. 1583 Hollis Street, P.O. Box 997, Halifax, Nova Scotia; J. M. Gordon, 801 Financial Building, 230 - 22nd Street, Saskatoon, Saskatchewan; Pierre Lamy, 1300 Stock Exchange Tower, P.O. Box 74, Victoria Square, Montreal, Quebec; Camille Marcoux, Suite 3500, 1155 Dorchester Boulevard West, Montreal, Quebec; T. H. McClelland, 700 Burrard Building, 1030 West Georgia Street, Vancouver, British Columbia; D. S. McGiverin, 35th Floor, 2 Bloor Street East, Toronto, Ontario; W. D. McKeough, P.O. Box 2001, Chatham, Ontario; P. M. Marshall, 255 - 5th Avenue South West, Calgary, Alberta; D. E. Mitchell, 639 - 5th Avenue South West, Calgary, Alberta; André Monast, Q.C., Suite 400, 65 Ste. Anne Street, Quebec City, Quebec; Fernand Paré, 925 Chemin St. Louis, Quebec City, Quebec; Antoine Turmel, Suite 500, 800 Dorchester Boulevard West, Montreal, Quebec; W. P. Wilder, P.O. Box 90, First Canadian Place, Toronto, Ontario; H. M. Wright, 14 Alberni Street, Vancouver, British Columbia; R. C. Ashenurst, A. G. Balogh, W. J. Barbour, B. C. Bone, E. K. Cork, G. H. Corlett, D. H. Ford, B. H. Grose, J. A. Hall, K. C. Hendrick, J. O. Hinds, Wm. James, F. X. Koch, B. H. Morrison, T. E. Phelps, Alfred Powis, R. P. Riggin, Q.C., W. E. Stubbington, L. J. Taylor, H. V. Thomson, L. S. Tigert, J. C. White and A. H. Zimmerman, P.O. Box 45, Commerce Court West, Toronto, Ontario. The management of Noranda Mines Limited has advised the Company that at March 15, 1982 Brascade Resources Inc. owned 46,860,975 common shares (37.1%) of Noranda Mines Limited and Zinor Holdings Limited owned 20,846,870 common shares (16.5%) of Noranda Mines Limited.

(c) The amount paid or payable by the Company to Noranda Mines Limited since the commencement of the Company's last completed financial year for management and supervision fee and expenses was \$355,000.

# Brenda Mines Ltd.

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**Registered Office:** The Mine Office, Brenda Mines Road, Out of Peachland, B.C.

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**Directors**

Bernard O. Brynelsen	Vancouver, B.C.
John A. Hall	Toronto, Ont.
John B. Knapp	Westbank, B.C.
William James	Toronto, Ont.
Morris M. Menzies	Vancouver, B.C.
Gordon H. Montgomery	Vancouver, B.C.
Alfred Powis	Toronto, Ont.
Horace B. Simpson	Kelowna, B.C.
H. Richard Whittall	Vancouver, B.C.

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**Officers**

Chairman	Bernard O. Brynelsen
President	John A. Hall
Vice-President and General Manager — Mining Operations	John B. Knapp
Secretary	B. H. Grose
Treasurer	E. K. Cork
Comptroller	D. H. Ford

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**Mine Office:**

P.O. Box 420, Peachland, B.C.

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**Solicitors:**

Davis & Company,  
14th floor, 1030 West Georgia Street,  
Vancouver.

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**Transfer Agent and Registrar:**

Canada Permanent Trust Company,  
701 West Georgia Street, Vancouver, and  
20 Eglinton Avenue W., Toronto, Ontario

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**Annual Meeting:**

May 5, 1982, 11:00 a.m. Room 231,  
Hotel Vancouver, Vancouver, B.C.

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# Report of The Directors

## Earnings

The disappointing financial results made 1981 a difficult year in spite of positive operating results that included record mill throughput, increased natural gas sales and continuing good results in safety.

Earnings of \$4.4 million or \$1.03 per share were substantially below the 1980 earnings of \$27.0 million or \$6.40 per share. Frenswick Holdings Limited contributed \$12.6 million as compared to \$13.3 million in 1980. As further described in the notes to the financial statements, part of the share of earnings in 1981 of Frenswick included an unusual gain of \$7.5 million related to the tender of common shares of Noranda to Brascade Resources Inc. The mine operation lost \$6.9 million in 1981 compared to a profit of \$14.8 million in 1980, while the oil and gas division lost \$1.3 million compared to a loss of \$1.1 million in 1980.

Bank borrowings at the end of 1981 were \$62.8, up \$25.0 million from the end of 1980. Dividends of \$4.0 million were received from Frenswick Holdings Limited and cash requirements were approximately:— mine \$4.3 million, oil and gas division \$13.7 million and interest payments \$11.0 million.

Copper and molybdenum rather than improving in price in the second half of 1981 as forecast in last year's annual report were casualties of the recession and fell to very low price levels in real terms.

Deductions from molybdenum revenue for inventory adjustments related to prior years' production resulted in a negative revenue from molybdenum in the fourth quarter and the total revenue for the year

was only \$20.9 million compared to \$56.8 million in 1980. Net copper revenue declined less dramatically but it was still down 14.6%. Molybdenum inventories at year-end were valued at \$11.0 per kilogram, less than half the value of \$23.50 per kilogram at the end of 1980. Copper inventories were valued at \$1.98 per kilogram compared to \$2.22 per kilogram at the end of 1980. The quantity of copper in inventory at year-end was 1.89 million kilograms, up 17.9% and molybdenum 2.14 million kilograms, up 47.3%.

## Mine

The performance at the mine was excellent and the production rate averaged a record 27,943 tonnes milled per calendar day. Production of copper, gold and silver increased 21% and molybdenum 17.6% compared to 1980. Although the total cost of production increased \$3.9 million or 11.7%, the unit cost remained the same for both years at \$3.99 per tonne milled because of a similar 11.7% increase in the tonnage milled.

The increase in production and higher metal recoveries in 1981 gives a good reflection on the efficiency of a very capable team at the mine. The staff and employees have been innovative over the years in developing systems and modifications to increase production and thereby contain the rise in unit operating costs. At the same time, improvements and changes to the concentrating process have been effective in maintaining high metal recoveries in spite of lower head grades. A recent mine innovation is the development of a computerized warning system which continuously monitors any movement on the pit wall. This is a significant advancement in the maintenance of a safe operation. The new sand flotation circuit at the mill is currently being commissioned and it will have a

favourable impact on recoveries from oxidized and low grade ores. In addition, one rod mill was speeded up and test results have indicated an 8% increase in tonnage for that circuit. If further evaluation and economics are favourable, the rod mills in the other three circuits could be speeded up to give a significant increase in total mill throughput.

## Oil and Gas

The oil and gas division is reported elsewhere in the annual report. When the gas reserves at Greater Cache were first purchased in 1977, it was anticipated that all permits would be in place to allow a start-up of the Brenda operated gas plant at that location in 1978. Finally it can be reported that this plant along with the two plants operated by Sulpetro at Clyde Lake and Florence had successful start-ups in November, 1981. The increase in gas sales from these plants does mean that a return will be made on the invested capital. Fifty-eight percent of Brenda's gas reserves are committed to these three plants. An additional twenty-seven percent is dedicated to Sulpetro's Sulcon II export contracts which were recently approved by the Alberta Energy Resources Conservation Board but which still await the approval of the National Energy Board. Net gas production is expected to increase from a net of 352 Mmcf in 1981 to 925 Mmcf in 1982 and 1,644 Mmcf in 1983. The oil and gas division projects a self-sustaining operation by 1984 contributing regular and increasing cash flows and thereby achieving the objective of reducing the cyclical nature of Brenda's earnings.



The oil and gas industry is highly regulated with regard to price and production. The path is still difficult for a small producer mainly because of high royalties, operating and administration costs against relatively low production. The business is capital intensive and consequently shut-in gas wells are liabilities until such time that revenues can be realized. The Alberta government has recognized this fact by improving the Crown royalty rebate program; further assistance through purchase of gas for storage would help the small producer.

**Capital Expenditures**

In 1981, capital expenditures which totalled \$17.0 million were justified on an expected improvement in metal markets and a much earlier emergence from the recession. Expenditures in the mine totalled \$9.1 million, including the two most costly items, namely the sand flotation circuit and the 15 cu. yd. shovel. The oil and gas division required \$7.9 million for land acquisition, productive drilling and tangible equipment for gas production.

Capital expenditures in 1982 have been reduced to the minimum and are projected to be \$4.7 million with \$1.9 million allocated to the mine and \$2.8 million to oil and gas.

**Outlook**

The financial good health of the company has slipped over the past two years due to heavy borrowings at a time of unprecedented high interest rates and low cash flows. The price of copper is at the lowest level in real terms for over 20 years, though it is expected to show some improvement late in 1982. Molybdenum is far below previous price levels and for this reason, the development of two potential large mine projects in the United States by major companies has been deferred.

Molybdenum sales remained very competitive in Europe where most of Brenda's molybdenum is sold and with the economy still weak any improvement in price is expected to be gradual.

The increasing debt is of concern to your Directors. Under current business conditions the sale of any asset can only be made at a very high discount to real value. It is ironic that further weakness in the Canadian dollar or lower interest rates would help the financial position. However, although the borrowing capacity remains strong, the Directors are in the process of considering various alternatives that might be used to reduce the debt. We regret the hardships that the stringent financial constraints have placed on shareholders and employees alike and hope that there will be improvement from these tough times before 1983.

Brenda's basic strength beyond its tangible assets is its employees. It is they who have achieved efficient utilization of production capacity, good results in occupational safety and health and improvements in the environment. With a high standing in these priorities, Brenda is prepared to restore profit and growth on the next upturn of the business cycle.

The Directors wish to extend their thanks to all employees for their contribution to the company's operations.

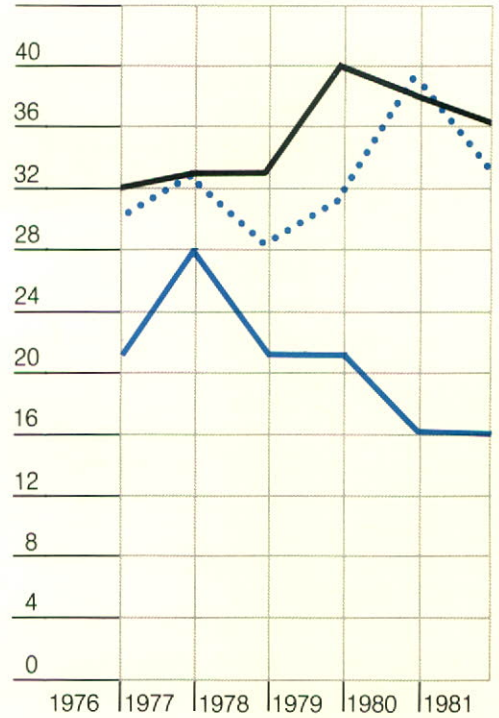
On behalf of the Board,

*J. A. Hall*  
President.

Toronto, Canada  
February 19, 1982

**Accident Frequency Per Million Man Hours**

All mines – B.C. —————  
Open pit mines – B.C. ....  
Brenda mines —————



# General Manager's Report

## To the President and Directors:

I submit herewith my report covering mining operations for the year 1981. All weights are in S.I. units.

A total of 20.8 million tonnes of material was handled in the pit of which 10.2 million tonnes were delivered to the concentrator. Approximately 2.7 million tonnes of the concentrator feed were recovered from the stockpile, and the remainder was delivered directly from the pit. A calculated amount of 7.2 million tonnes remains in the stockpile for recovery in future years.

Remaining mineral inventories total 119 million tonnes grading 0.147% copper and 0.032% molybdenum, and are sufficient for a further 12 years of operation at the current rate providing metal prices return to a more realistic level in the near future.

The pit walls continued generally stable throughout the year with only three small areas exhibiting minor movement. One potentially weak area was reinforced and instrumented to provide continuous monitoring readouts through a system of radio transmission and the engineering office computer. It is a unique system developed by the Brenda staff and shows much promise of providing an accurate early warning of ground movement.

A new mining shovel was placed in service in mid year to replace one of the existing original machines. The higher average mechanical availability of all shovels was a factor in the record tonnage moved by the mine crews and also assisted in lowering unit costs of loading.

Concentrator operation was uninterrupted during the year and the total ore milled was significantly higher. Concentrate grades were normal and metal recoveries were improved. Ore from a less-refractory area in the stockpile contributed to the improvement, but increased knowledge and experience

Statistical		1981	1980
Waste stripped	Tonnes	10,644,800	9,116,000
Ore milled	Tonnes	10,199,300	9,126,900
Ore milled per calendar day	Tonnes	27,900	24,900
Copper content of ore	% Cu	0.137	0.128
Copper recovery	%	82.09	80.67
Copper concentrates produced	Tonnes	38,160	32,390
Copper concentrates grade	% Cu	29.95	29.03
Molybdenum content of ore	% Mo	0.033	0.033
Molybdenum recovery	%	79.11	75.05
Molybdenum concentrates produced	Tonnes	4,817	4,106
Molybdenum concentrates grade	% Mo	55.90	55.75

within the concentrator staff was also a factor.

Replacement of the bulk flotation circuits referred to last year was not completed as expected. Equipment design changes and re-scheduled delivery of various items contributed to the delay, but revised installation schedules were implemented to reduce the overall costs. The new cells are now in operation and performing satisfactorily, and installation of the remaining equipment for the sand/slime separation is proceeding.

Two Brenda leaching systems for upgrading molybdenum concentrates were commissioned during 1981 for B.C. mines, and both are performing satisfactorily. Operation of the system previously installed at a South American mine has been expanded and is now treating additional concentrate from an associated mine. All of these plants now produce more saleable concentrates for the difficult markets existing today, and also provide small, but welcome, royalty payments to Brenda.

Mineral exploration activity was greatly reduced and confined to two near-by areas, but nothing of significance was discovered. The areas will be retained for possible further examination in the future when metal prices recover.

The work force at December 31 consisted of 116 salaried and 340 hourly rated employees.

The Collective Agreement with Local 7618 of the United Steelworkers of

America was re-newed late in the year for a further 22-month period. Revised wage scales were implemented to give employees pay rates similar to those existing at nearby mines and negotiations on a wage re-opener scheduled for the summer of 1982 will determine wages for the final twelve months of the contract period. Company-Union relations and employee relations continue to be good.

Safety awareness among employees remains at a high level, and many employees take a keen interest in mine rescue and first aid training. One of the shift teams won a district open pit mine rescue competition during the year. However, accident frequency remained at the same level as in 1980, and greater effort will be expended in an attempt to reduce it further.

It is a pleasure to acknowledge and record the continuing efforts of the staff and employees throughout the year. An experienced and competent work force is a particularly valuable asset to a low grade operation under present day economic conditions.

Respectfully submitted,

**J. B. Knapp**

*Vice President and General Manager*  
24 February 1982

# Metal Markets

During 1981 prices for most metals continued in the downward trend that started at the end of the first quarter of 1980. Persistently high inflation and escalating interest rates discouraged investment and consumption. By the end of the year demand and prices were both at depressed levels and producers' inventories were rising. Once again, the anticipated economic advance was at least a year away.

## Copper

### Western World Balance

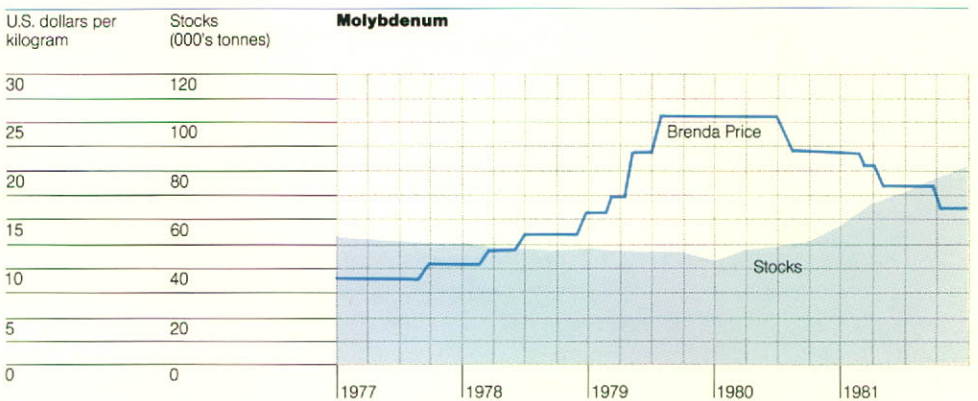
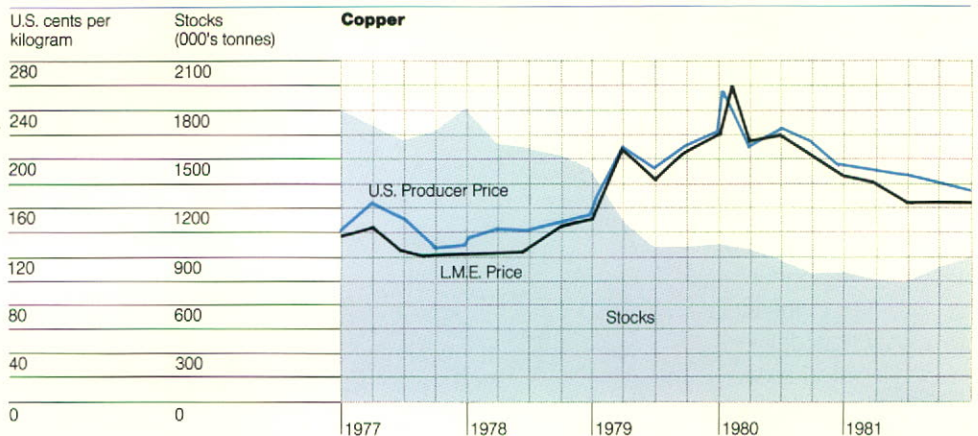
'000 Tonnes

	1979 Year	1980 Year	1981 Year
Supply	7,075	7,095	7,200
Consumption	7,520	7,270	7,110
Year-end stocks	1,005	830	920

An improvement in industrial production early in the year was not sustained as most industrialized countries followed the United States into recession. The automotive and housing industries remained at low levels of activity and copper consumption fell for the second year in a row. Production cuts at several North American operations limited the rise in stocks to less than 100,000 tonnes.

Prices on the London Metal Exchange peaked at U.S. \$1.94 per kilogram at the beginning of January and then declined to levels below the cost of production for many mines to end the year at \$1.65. Although still not imminent, the relatively low level of stocks and further production cutbacks suggest that when it does occur, the price recovery will be quite sharp.

The supply of copper concentrate was adequate for most of 1981 but is likely to tighten when demand from new smelters in the Philippines and Brazil coincides with the lower level of mine production resulting from continuing cutbacks at mines in North America and elsewhere.



## Molybdenum

### Western World Balance

'000,000 kg. Mo.

	1979 Year	1980 Year	1981 Year
Supply	91	95	96
Consumption	93	80	73
Year-end stocks	43	58	81

Continuing depressed conditions in the world specialty steel industry, which operated at around 55% to 65% of capacity, resulted in a progressively deteriorating demand for molybdenum throughout the year. As Western World production remained at a high level, and since customers continued to hold minimum inventories, producer stocks increased significantly during the period.

The price for molybdc oxide produced by Brenda was reduced from U.S. \$22.27 to \$15.21 per kg by year-end. Free market prices remained at a significant discount throughout the whole year ranging from U.S. \$18.00 per kg early in 1981 to below \$9.00 in December. Although cutbacks were initiated by major producers at year-end, new mine production could be an offset. Thus, despite some anticipated improvement in demand, producer inventories are not expected to decline substantially during 1982.

Exploration and development expenditures during the year in Alberta and British Columbia totalled \$10.6 million. Of that, \$5.2 million was spent on seismic and drilling, \$1.2 million for land acquisition, and \$4.2 million for production facilities. Cumulative expenditures since inception in 1977 have been \$38.9 million.

On the major joint exploration program with Sulpetro Limited, earning expenditures have been completed on 22 of 25 project areas. Earning expenditures expected to be completed in 1981 will extend into the 1st and possibly 2nd quarters of 1982.

Brenda participated in 74 wells during the year of which 43 were capped for gas production, 3 were capped for oil production and 28 abandoned, a success ratio of 62.2%. As of December 31, 1981 Brenda had an interest in 151 wells, 28 of which are producing.

Net land holdings at year-end were 57,634 hectares, up 9,413 hectares over the year. Approximately 5,245 hectares were acquired at Crown land sales and 4,168 hectares were earned through seismic and/or drilling expenditures. Land acquisition costs averaged \$93 per acre in 1981 resulting in a cumulative reserve acquisition cost of \$84, per acre.

An August 1, 1981 update of Brenda's proven and probable reserves by an independent consultant indicated the reserves set out below (in billions of cubic metres (bcm)) which represents a 30.3% increase in reserves over 1980 year-end figures.

	Gross Before Royalty Deductions	Gross After Royalty Deductions
	Bcm	Bcm
Proven	1.069	.711
Probable	.163	.111
Total Proven plus Probable	1.232	.822

Gas sales from Amisk and Granlea continued in 1981 and were supplemented by new gas sales from Greater Cache, Clyde Lake, Florence and Victoria. Brenda's interest in production in these areas average 43.5 10<sup>3</sup>m<sup>3</sup>/d over the year. Total operating cash income was \$0.7 million.

The gas plants at Clyde and Florence commenced production about October 1, 1981 and the Brenda operated Greater Cache gas plant went on stream November 12, 1981. All areas are producing under Pan Alberta gas contracts. Brenda's combined net allocation from these three plants is 200 10<sup>3</sup>m<sup>3</sup>/d. Fifty-eight percent of Brenda's gas reserves are committed to these three gas plants and an additional 27% of the reserves are dedicated to the Sulcon II contract which, when approved by the Government, will bring Brenda's contracted volumes up to 85 percent of its present total gas reserves.

Additional offshore seismic surveying on the 202,340 hectare petroleum permit in the British Virgin Islands (net 25% Brenda interest) is planned in 1982.

## Metric conversion

1 metre	= 3.2808 feet
1 hectare	= 2.47 acres
1 cubic meter	= 6.293 barrels
1 cubic meter	= 35.181 cubic feet
10 <sup>3</sup> m <sup>3</sup> /d	= 1000 cubic metres per day

In Australia additional seismic surveying was conducted on NT/P26 permit offshore NW Australia-Timor Sea area with a well scheduled to be drilled in the second half of 1982. Further seismic work is planned to be undertaken on Q/20P permit located in the Gulf of Carpentaria, Queensland.

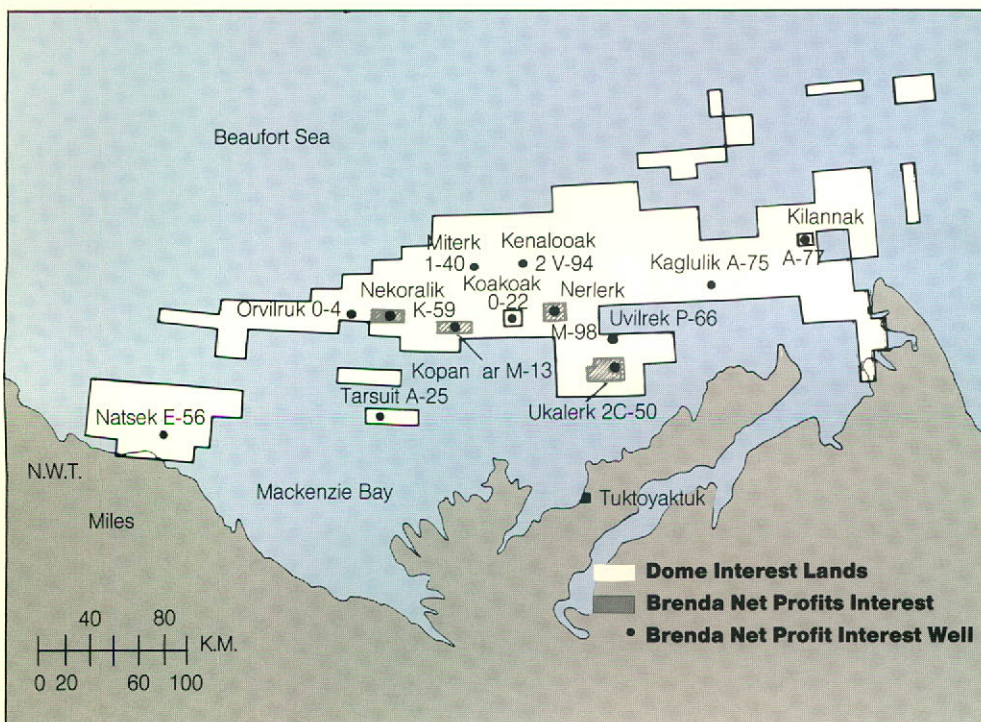
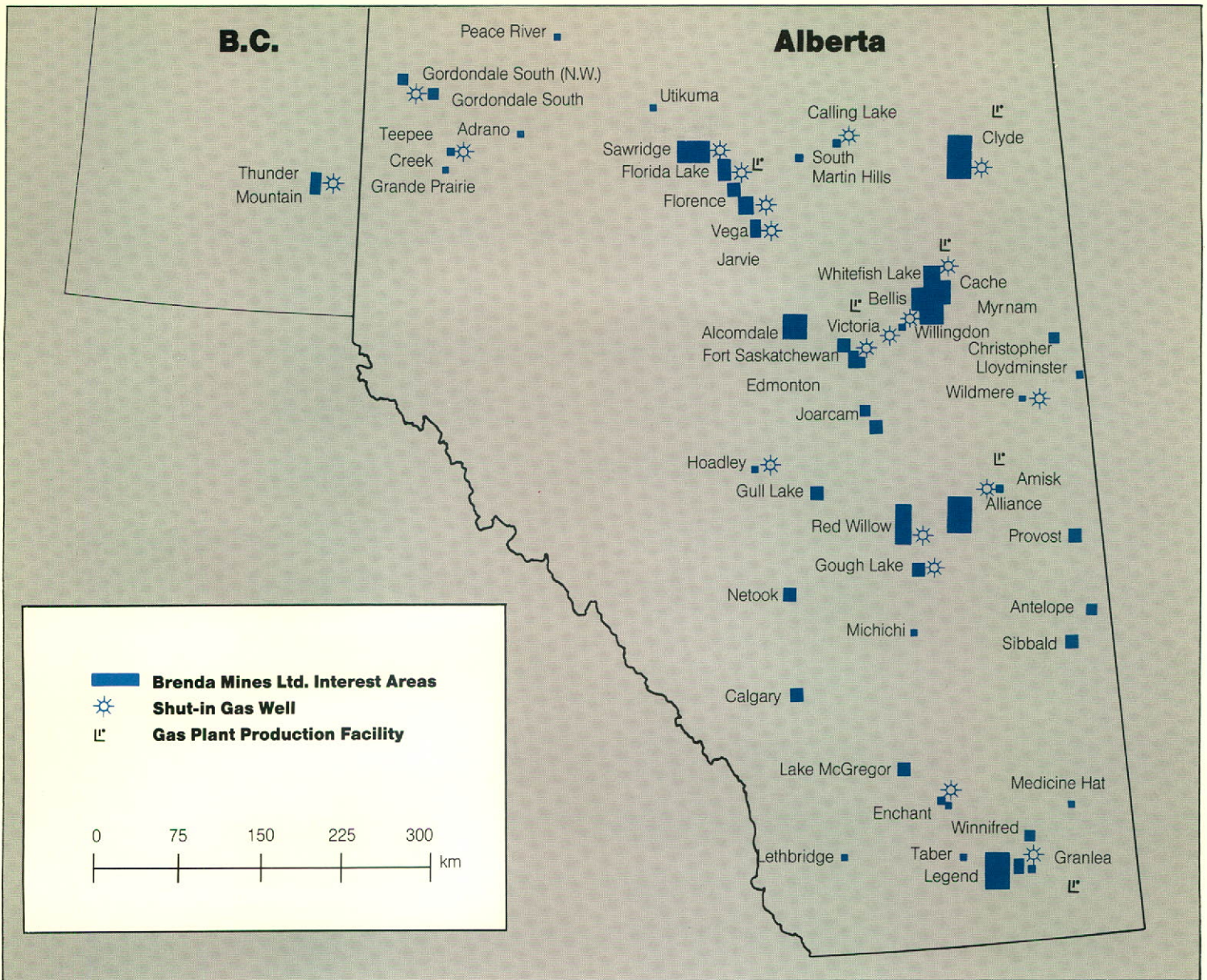
In the Beaufort Sea where Brenda has a net profits interest in fourteen wells, three of the five wells which had not reached projected total depth in the 1980 drilling season were completed in 1981. Kilannak A-77 was dry and abandoned. However, Kopanoar I-44 had an oil flow capacity of 800 to 1,600 cubic metres of oil per day and the whole Kopanoar structure was estimated by an independent consultant to Dome Petroleum Limited to contain oil-in-place of 300 to 700 million cubic metres. Koakoak 0-22 well which was only partially tested had a minimum flow capacity of 800 cubic metres per day and the whole Koakoak structure was estimated to contain oil-in-place of 300 to 800 million cubic metres. Orvilruk 0-33 was drilled to 3,600 metres and Kenalooak to 3,480 metres in 1981: both are scheduled to be completed in 1982.

## Brenda Net Profit Interests – Beaufort Sea

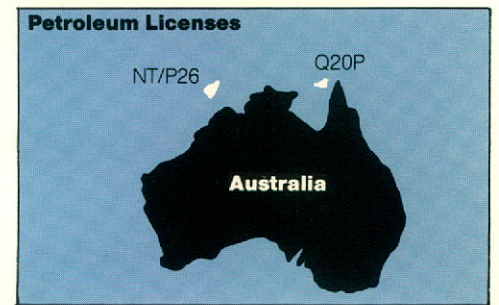
Well and Surrounding 405 hectares	Brenda Net Profit Interest %	Status at 12/31/81
Kopanoar M-13	1.2540	2.066 cubic metres/D oil well
Nektoralik K-59	1.0000	175 cubic metres/D oil well
Ukalerk 2C-50	1.0833	2.4 million cubic metres/D Gas Well
Tarsiut A-25	.5642	127 cubic metres/D oil well
Nerlerk M-98	1.3999	Waiting on production test
Kopanoar 21-44	1.0657	790 to 1590 cubic metres/D Oil Well
Koakoak 0-22	.3287	Min. 790 cubic metres/D Oil Well
Kenalooak 2V-94	.7286	Partially drilled
Kilannak A-77	.7286	Abandoned
Orvilruk 0-3	.3999	Partially drilled
Natsek E-56	.3166	Suspended at 2.743 metres
Miterk I-44	.3999	Location
Uvilruk P-66	.3999	Location
Kaglulik A-75	.3999	Location

In addition Brenda holds a 1% net profit interest in the following entire blocks:

Nektoralik – 10,400 hectares. Kopanoar – 10,453 hectares. Ukalerk – 15,533 hectares. Nerlerk – 10,419 hectares.



**Brenda Off Shore Interests in Australia and British Virgin Islands**



## Balance Sheet

December 31  
(\$000)

	<b>1981</b>	1980
<b>Assets</b>		
Current assets:		
Accounts receivable	\$ 11,685	6,291
Inventories	32,534	43,551
Prepaid expenses	56	103
Total current assets	44,275	49,945
Investment in associated company (Note 2)	82,149	73,312
Oil and gas properties (Note 3)	29,211	21,628
Property, buildings and equipment (Note 4)	27,069	22,119
Other assets	215	215
	<b>\$182,919</b>	167,219
<b>Liabilities and Shareholders' Equity</b>		
Current liabilities:		
Bank advances (Note 5)	\$ 62,863	37,803
Accounts payable	5,829	6,968
Income and resource taxes (Note 6)	2,029	14,769
Total current liabilities	70,721	59,540
Taxes provided not currently payable	12,883	12,970
Shareholders' equity:		
Capital stock (Note 7)	8,218	8,218
Retained earnings	91,968	87,614
	100,186	95,832
Less the company's pro rata interest in its shares held by the associated company (Note 2)	(871)	(1,123)
Total shareholders' equity	99,315	94,709
	<b>\$182,919</b>	167,219

See accompanying notes to financial statements.

On behalf of the Board:

*J. A. Hall*

Director

*B. Brynelsen*

Director

## Statement of Earnings

Years ended December 31  
(\$000)

	1981	1980
Gross value of concentrates produced	\$46,120	83,493
Less smelter and distribution charges	7,888	6,438
	38,232	77,055
Value of oil and gas produced	806	238
	39,038	77,293
Cost of production	37,485	33,555
Depreciation, depletion and amortization	4,280	3,120
Exploration expense:		
Mineral	748	1,175
Oil and gas	2,702	3,194
Administration and general expense	2,160	2,037
Municipal and sundry taxes	1,592	1,204
	48,967	44,285
Operating income (loss)	(9,929)	33,008
Interest and other income	582	306
Deduct interest expense	10,990	4,592
	(10,408)	(4,286)
Earnings (loss) before taxes and share of earnings of associated company	(20,337)	28,722
Income and resource taxes	(12,116)	15,030
	(8,221)	13,692
Share in earnings of associated company (Note 2)	12,575	13,300
Net earnings	\$ 4,354	26,992
Earnings per share	\$ 1.03	6.40

## Statement of Retained Earnings

Years ended December 31  
(\$000)

	1981	1980
Retained earnings, beginning of year:	\$87,614	66,875
Net earnings	4,354	26,992
	91,968	93,867
Dividends paid	—	6,253
Retained earnings, end of year	\$91,968	87,614

See accompanying notes to financial statements.

## Statement of Changes in Financial Position

Years ended December 31  
(\$000)

	1981	1980
Source of funds:		
Operations:		
Net earnings	4,354	26,992
Add (deduct) items not involving working capital		
Depreciation and amortization	4,280	3,120
Taxes provided not currently payable	(87)	2,613
Share of earnings of associated company less dividends received	(8,585)	(9,496)
	(38)	23,229
Fixed asset disposals	207	—
	169	23,229
Application of funds		
Investment in associated company	—	13,171
Purchase of oil and gas properties	7,889	6,239
Purchase of property, buildings and equipment	9,131	4,335
Dividends	—	6,253
	17,020	29,998
Increase in working capital deficiency	16,851	6,769
Working capital deficiency, beginning of year	\$ 9,595	2,826
Working capital deficiency, end of year	\$26,446	9,595

See accompanying notes to financial statements.

### Auditors' Report

to the Shareholders  
of Brenda Mines Ltd.

We have examined the balance sheet of Brenda Mines Ltd. as at December 31, 1981 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, 1981 and the results of its operations and 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.

Vancouver, Canada  
January 27, 1982

Clarkson Gordon  
Chartered Accountants



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1. Summary of significant accounting policies

(a) Basis of presentation of financial statements

The company follows the equity method of accounting for its investment in Frenswick Holdings Ltd. Under the equity method the investment is initially recorded at cost and adjusted thereafter for the company's pro rata share of earnings less dividends received since the date of investment.

(b) Foreign currency translation

Current assets and liabilities in foreign currency have been translated into Canadian dollars at the rate of exchange prevailing at year end. Exchange gains or losses resulting from such translation are included in earnings.

(c) Inventories

Copper and molybdenum concentrates are valued at estimated net realizable value. Stores are valued at the lower of average cost or replacement cost.

(d) Oil and gas properties

The company follows the successful efforts method of accounting for its oil and gas properties. Acquisition costs of oil and gas properties together with costs of drilling and equipping successful wells are capitalized. Shut-in well costs are capitalized pending commencement of production.

Exploration expenditures, including geological and geophysical costs, annual rentals on exploratory acreage and dry holes are charged to expense.

Production equipment and gathering systems are recorded at cost.

Petroleum incentive tax credits related to eligible expenditures are recorded as a reduction of exploration and development costs.

(e) Depreciation, depletion and amortization

Depreciation of property, buildings and equipment is based on the estimated service lives of the assets calculated using the straight-line method.

Additions, betterments and renewals are capitalized and expenditures for maintenance and repairs are charged to expense. When depreciable assets are retired or otherwise disposed of, the cost and related accumulated depreciation are removed from the accounts and the resulting gain or loss is reflected in earnings.

The cost of mineral claims and leases is being amortized over fifteen years.

Capitalized costs of proven oil and gas properties, production equipment and gathering systems are depleted on the unit of production method based on estimated recoverable reserves.

(f) Income taxes

The company follows the tax allocation method of accounting for income and resource taxes. Taxes not currently payable, as a result of claiming for tax purposes amounts different from those recorded in the accounts, are charged against current earnings. Deferred income and resource taxes, resulting from inventories being valued at cost for tax purposes, are included in current liabilities.

2. Investment in associated company:

The company owns 3,324,822 common shares of Frenswick Holdings Ltd., representing 38.2% of the outstanding common shares. Frenswick owns 36.3% of the outstanding common shares of Zinor Holdings Limited, the principal asset of which is a 16.5% (1980 – 21.2%) interest in the common shares of the company's parent, Noranda Mines Limited. These reciprocal shareholdings result in the company having an interest of 1.2% (1980 – 1.5%) in its own shares which has been deducted from shareholders equity (see Note 7). Similarly the company's net income and earnings per share have been determined after taking into account such reciprocal shareholdings.

During 1981, Noranda issued common shares from treasury to Brascade Resources Inc., and some of Zinor's common shares of Noranda were taken up by Brascade pursuant to its offer to purchase additional Noranda shares. Both of these transactions were effected at values per share in excess of the carrying value of the Noranda shares in Zinor's accounts and accordingly, under the equity method of accounting, Zinor recognized unusual gains attributable to the increase in the underlying value of the Noranda shares. The company's share of the unusual gains amounted to \$7,500,000 and is included in the Statement of Earnings as part of the share of earnings of Frenswick.

3. Oil and gas properties, at cost unless otherwise noted, less depreciation and amortization are as follows:

	<b>1981</b>	1980
		(\$000)
Net profits investments in frontier areas, at net cost	<b>\$ 73</b>	73
Productive properties	<b>11,489</b>	11,303
Unevaluated properties	<b>4,508</b>	3,491
Productive drilling	<b>7,003</b>	4,513
Tangible production equipment	<b>6,783</b>	2,587
	<b>29,856</b>	21,967
Less depreciation, depletion and amortization	<b>645</b>	339
	<b>\$29,211</b>	21,628

	1981	1980
4. Property, buildings and equipment, at cost, less accumulated depreciation and amortization are as follows:		
	(\$000)	
Buildings, equipment and related facilities	<b>\$56,433</b>	50,779
Mobile equipment	<b>13,135</b>	10,742
Residential land and buildings	<b>215</b>	304
	<b>69,783</b>	61,825
Less accumulated depreciation	<b>42,795</b>	39,810
	<b>26,988</b>	22,015
Mineral claims and leases, at cost less accumulated amortization	<b>81</b>	104
	<b>\$27,069</b>	22,119

	1981	1980
5. Bank advances		
	(\$000)	
Bank overdraft	<b>\$ 877</b>	\$ 1,208
Demand loan, with interest at bank prime rate (December 31, 1981 – 17.25%)	<b>61,986</b>	26,595
Bankers' Acceptances		10,000
	<b>\$62,863</b>	\$ 37,803

The investment in the common shares of Frenswick Holdings Ltd. has been provided as collateral for the demand loan.

6. Income and resource taxes
- Current income and resource taxes payable include deferred income taxes of approximately \$3,974,000 (1980 – \$12,909,000) and are net of \$2,080,000 recoverable taxes arising from a 1981 loss carry back. As at December 31, 1981 the company has estimated investment tax credits of \$1,135,000 which are available as a deduction from future taxes payable.

7. Capital stock		
Authorized 5,000,000 shares without nominal or par value.		
	<b>1981</b>	1980
		(Number of Shares)
Issued	<b>4,282,000</b>	4,282,000
Less pro rata interest in its shares held by the associated company (note 2)	<b>49,830</b>	64,230
	<b>4,232,170</b>	4,217,770

8. Commitments

At December 31, 1981 the company was committed to the purchase and construction of fixed assets of \$494,000. Approved expenditures for oil and gas exploration and development amount to \$1,986,000.

9. Related party transactions

The company has entered into a sales agency agreement with Noranda Sales Corporation Ltd., an agent of Noranda Mines Limited which owns 50.86% of Brenda Mines. Under the terms of this agreement, Noranda Sales is responsible for selling all mine products and for collection of the proceeds. For these services, Noranda Sales was paid commissions which totalled \$397,844 during 1981 (1980 – \$646,767).

As at December 31, 1981 amounts totalling \$8,413,190 (1980 – \$4,469,259) were due through Noranda Sales from third parties and sales commissions totalling \$104,270 (1980 – \$49,661) were payable to Noranda Sales. These outstanding balances are current and normal under the terms of the sales agency agreement.

Noranda Mines Limited acts as manager and provides technical assistance and services to the company at cost. During the year \$355,000 (1980 – \$287,000) were paid to reimburse Noranda for these services.

During the year the company purchased approximately \$909,000 (1980 – \$1,798,000) of production supplies and services from related parties.

10. Comparative figures

The financial statements for the preceding year were examined by other Chartered Accountants.

11. Segmented information

The company operates in two industries, mining and milling in British Columbia, and oil and gas exploration and development programs in Alberta and British Columbia.

Information regarding industry segments is set out below:

	<b>1981</b>	1980
	(\$000)	
Value of production:		
Mining and milling	<b>\$ 38,232</b>	\$ 77,055
Oil and gas	<b>806</b>	238
Total revenue	<b>\$ 39,038</b>	\$ 77,293
Segment operating profit (loss):		
Mining and milling	<b>\$ (6,434)</b>	\$ 37,561
Oil and gas	<b>310</b>	103
	<b>(6,124)</b>	37,664
General corporate expenses	<b>(355)</b>	(287)
Exploration expense	<b>(3,450)</b>	(4,369)
Interest expense – net	<b>(10,408)</b>	(4,286)
Share of earnings of associated company	<b>12,575</b>	13,300
Income and resource taxes	<b>12,116</b>	(15,030)
Net income for the year	<b>\$ 4,354</b>	\$ 26,992
Depreciation, depletion and amortization:		
Mining and milling	<b>\$ 3,974</b>	\$ 3,013
Oil and gas	<b>306</b>	107
	<b>\$ 4,280</b>	\$ 3,120
Identifiable assets:		
Mining and milling	<b>\$ 71,559</b>	\$ 72,279
Oil and gas	<b>29,211</b>	21,628
Investment in associated company	<b>82,149</b>	73,312
	<b>\$182,919</b>	\$167,219
Capital expenditures:		
Mining and milling	<b>\$ 9,131</b>	\$ 4,335
Oil and gas	<b>7,889</b>	6,239
	<b>\$ 17,020</b>	\$ 10,574

The company exports copper concentrate to Japan and molybdenum to Europe.

## Distribution of Revenue

\$000's	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Revenue – net	27,067	40,958	41,006	32,757	40,910	52,371	65,818	92,328	77,599	39,620
Wages and benefits paid	4,657	4,599	6,264	7,095	8,282	9,431	10,742	11,448	13,399	15,511
Depreciation and depletion	3,667	3,678	4,040	3,983	4,115	4,391	4,231	4,483	3,120	4,280
Energy, supplies, services and other business costs	13,812	12,168	14,744	15,042	15,689	16,332	18,414	17,759	26,785	35,124
Exploration written off	—	—	—	—	—	4,994	7,818	19,775	4,369	3,450
Preproduction expenditures	5,767	1,442	—	—	—	—	—	—	—	—
Pre-tax profits (loss)	(836)	19,071	15,958	6,637	12,824	17,223	24,613	38,863	29,926	(18,745)
Provided for payments to governments	684	2,336	7,563	4,031	7,334	7,743	11,185	16,813	16,234	(10,524)
Profit (loss) after taxes	(1,520)	16,735	8,395	2,606	5,490	9,480	13,428	22,050	13,692	(8,221)
Share of after-tax profits in associated company	—	—	—	—	—	—	—	2,438	13,300	12,575
Earnings (loss)	(1,520)	16,735	8,395	2,606	5,490	9,480	13,428	24,488	26,992	4,354
Re-invested in the business	(1,520)	16,735	8,395	2,606	4,933	7,382	8,889	16,138	20,739	4,354
Dividends paid	—	—	—	—	557	2,098	4,539	8,350	6,253	—

## Statistics

Tonnes milled (000's)	8,621	8,045	8,664	9,116	10,048	9,634	9,995	9,076	9,127	10,199
Number of employees	396	405	433	439	442	463	470	464	467	456
Gross capital employed (historical \$000's)	94,612	92,553	82,052	92,390	94,484	104,594	111,833	175,396	208,283	241,176



