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Kerr Addison Mines Limited



Annual Report 1978

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MCGILL UNIVERSITY

Kerr Addison Mines Limited

DIRECTORS:

P. S. Cross
Executive Vice-President
Kerr Addison Mines Limited

Allan Findlay, Q.C.
Partner
Tilley, Carson & Findlay

J. O. Hinds
Executive Assistant to the President
Noranda Mines Limited

William James
President
Kerr Addison Mines Limited

James W. McCutcheon, Q.C.
Partner
Shibley, Righton & McCutcheon

D. G. Neelands, Q.C.
Chairman & Chief Executive Officer
Canada Permanent Mortgage Corporation

J. P. W. Ostiguy, O.C.
Chairman
Greenshields Incorporated

Alfred Powis
Chairman and President
Noranda Mines Limited

W. H. Rea, C.M.
Vice-President
The Mutual Life Assurance Company of Canada

W. S. Row
Chairman of the Board,
Kerr Addison Mines Limited

D. E. G. Schmitt
Vice-President — Mines
Noranda Mines Limited

OFFICERS:

W. S. Row
Chairman of the Board

William James
President & Chief Executive Officer

P. S. Cross
Executive Vice-President

I. D. Bayer
Treasurer

J. B. Sage
Secretary

D. A. Lowrie
Vice-President — Exploration

A. H. Cross
Comptroller

OPERATIONS:

The Kerr Addison Mine
J. K. Teal, Manager

Agnew Lake Mines Limited
G. M. Deutman, Manager

Mogul of Ireland
P. S. Cross, Chairman
& Managing Director
W. E. Hitchman, Manager

HEAD OFFICE AND EXPLORATION OFFICE:

P.O. Box 91
Commerce Court West
Toronto, Ontario
M5L 1C7

REGISTRAR AND TRANSFER AGENTS:

Canada Permanent Trust Company, Toronto
Registrar & Transfer Company, New York, N.Y.
and Jersey City, N.J.

ANNUAL AND GENERAL MEETING OF SHAREHOLDERS:

Tuesday, April 24, 1979, 12:00 noon
in the Tudor Room, Royal York Hotel
Toronto, Ontario



Financial Summary:

	1978	1977	1976	1975	1974
Millions of Dollars					
Production revenue	\$ 40.8	\$ 44.5	\$ 38.4	\$ 25.7	\$ 37.0
Investment income	3.8	3.3	2.9	5.3	5.7
Income and mining taxes	4.0	4.5	4.6	1.6	7.9
Net income	9.6	6.2	6.8	9.0	15.3
Dollars Per Share					
Net income	\$ 1.01	\$.65	\$.71	\$.94	\$ 1.61
Income and mining taxes	.42	.47	.48	.17	.83
Dividends declared	.50	.50	.50	.50	.70
Net value of current assets and investments at market	6.60	6.00	9.30	9.83	9.06

The Gold Picture:



**Directors'
Report to
the Shareholders**

Earnings for the year ended December 31, 1978 with comparative figures for 1977 are as follows:

	1978	1977
Operating profits	\$7,444,000	\$6,692,000
Add (deduct): Special items	2,205,000	(506,000)
Net income	<u>\$9,649,000</u>	<u>\$6,186,000</u>
Net income per share	<u>\$1.01</u>	<u>\$.65</u>

During 1978, operating profits increased slightly over those of the previous year due to higher earnings from the Kerr Addison mine and the Canadian Electrolytic Zinc reduction plant and, higher investment income. Strong gold and zinc markets, together with the weaker Canadian dollar, were the main factors contributing to the improved operating results. Mogul of Ireland incurred a small loss on lower production and lower realizations on concentrate sales.

Net income for 1978 of \$9.6 million or, \$1.01 per share, included \$2.2 million or, 23 cents per share, in gains on sale of investments, compared to earnings of 65 cents per share in 1977, after deducting 5 cents per share in special items.

During the year working capital declined by \$9.8 million to a deficit of \$1.0 million at December 31, 1978, as the Agnew Lake project required expenditures of \$16.0 million and, a further \$8.9 million was expended on the gas and oil properties operated by Canadian Hunter. Cash flow from operations, from proceeds on sale of investments and from receivables outstanding at December 31, 1977, resulted in the Company's bank borrowings being reduced by \$15.1 million during the year to \$12.9 million at December 31, 1978. The net value of current assets and investments at market increased to \$63 million or, \$6.60 per share at December 31, 1978, from \$6.00 per share a year earlier.

During 1978, the Company paid dividends of \$4.8 million or, 50 cents per share, as in the previous three years. As a result of amendments made to the Income Tax Act in 1977, the Company will no longer be able to pay dividends out of 1971 capital surplus on Class B shares. However, the amendments provide a tax treatment on stock dividends paid by Canadian public companies which is somewhat similar to that of cash dividends paid out of 1971 capital surplus on hand to the holders of Class B shares prior to the end of 1978. In this regard, the Directors have passed resolution, for confirmation by the shareholders as Special Resolution Number 6 at the Annual and General Meeting to be held on April 24, 1979, authorizing an Amendment to the Articles of the Corporation permitting the Directors at their option, to determine with respect to any cash dividend declared, that shareholders may elect to receive, in lieu of such cash dividend a stock dividend of substantially equivalent value. Concurrent with this authority, in order to simplify the existing share structure, it is proposed that the Class A and Class B shares be eliminated, and that the share structure revert back to one class of common shares. Full details of this matter are set out in the accompanying Information Circular and Notice of Meeting.

Production of gold from the Kerr Addison mine at Virginiatown, Ontario, declined to 83,200 ounces produced from 256,000 tons of ore grading 0.33 ounces of gold per ton, compared to 106,100 ounces in 1977 produced from 239,000 tons of ore grading 0.45 ounces of gold per ton. Operating earnings increased from 1977 levels due to higher realizations on gold sales. The price of gold during 1978 was affected by the continued U.S. trade deficit and currency weakness and it averaged \$193 (U.S.) per ounce compared to \$148 per ounce during 1977. However, the current high level of gold prices is unlikely to add significantly to the life of the mine and, the

Directors' Report to the Shareholders (continued)

120,000 ounces of gold remaining in reserves at the end of 1978 are expected to be mined out, at lower production rates, during the next two years.

During the first quarter of 1978, with the market for zinc concentrates in an oversupply position and with the producer price for zinc metal in Europe at \$550 U.S. per metric tonne, production was reduced at the 75% owned Mogul of Ireland zinc-lead mine, located in County Tipperary, Republic of Ireland, in order to minimize losses. As a result, production amounted to 722,000 tons grading 5.9% zinc and 2.9% lead compared to 931,000 tons grading 6.7% zinc and 2.5% lead produced during 1977. Efforts were also made to keep unit operating costs in line by reducing exploration and mine development, eliminating overtime and cutting the work force back by 11%. During the second half of 1978, there were four increases in the price of zinc, bringing the European producer price to \$720 U.S. per metric tonne by late October. This, together with stronger lead markets, resulted in an improved earnings performance in the second half but, for the year Mogul suffered a small loss. Proven reserves at year end amounted to 2.8 million tons grading 5.5% zinc and 2.9% lead. Concentrate production during 1979 is projected to be slightly lower than 1978 levels.

Earnings from the 9.8% owned Canadian Electrolytic Zinc reduction plant in Valleyfield, Quebec, were substantially above those of the previous year. The plant operated at a rate of 483 tons of zinc slab per day, or 78% of plant capacity, compared to a production rate of 69% during 1977. With stronger zinc markets, stocks of zinc metal and concentrates were down sharply from the previous year end, to normal working levels at December 31, 1978. Plans for 1979 assume that production will be in balance with forecast shipments and that an operating rate of 84% of capacity will be attained.

Production during 1978 from the 90% owned Agnew Lake Joint Venture uranium property, located west of Sudbury, Ontario, amounted to 400,000 pounds of U_3O_8 , of which 250,000 pounds came from the surface leach pile and the balance from underground stopes. Uranium produced, particularly from underground, was substantially below expectations.

As a result of faulting, the underground stopes being mined are not as steeply dipping as had been projected from initial diamond drilling. Therefore, the method of solution distribution which had been designed for extracting the uranium from stopes, was not wetting all the ore broken in the stopes and required major modifications to a flood leaching system during 1978. This restricted production from underground. These modifications had been completed on existing stopes by year end but, have delayed the preparation of new stopes for leaching. As a result, the rate of extraction of uranium from broken ore under actual operating conditions has not, to date, duplicated the original test results upon which the design of the operation was based.

Production during the fourth quarter amounted to 120,000 pounds of U_3O_8 , compared to production of 115,000 pounds, 96,000 pounds and 69,000 pounds respectively during the previous three quarters of 1978. During the first quarter of 1979, production will decline from the levels achieved during the final two quarters of 1978. Thereafter, production is expected to gradually increase as more stopes are available for flood leaching to provide adequate uranium and retention time to build up and maintain the grade of solution feed to the mill. During the past two years, production rates have been significantly below estimates. Management believes that production can be substantially increased from the level obtained in 1978.

Because of the complexities of the process and problems experienced to date, it is not possible to state at this time that production revenues from the operation will attain levels sufficient to recover ongoing costs and expenditures made to date. If during the next year, substantial improvements in production levels are not achieved, the viability of the operation in its present form will have to be reassessed.

Agnew Lake's 90% share of expenditures on the project, net of production revenues, amounted to \$16 million during 1978, or \$6 million in excess of plan, due primarily to the lower amounts of uranium produced and, to the additional costs of converting to a flood leaching system.

Deliveries during 1978 totalled 600,000 pounds of U_3O_8 , of which 260,000 pounds were borrowed from Eldorado Nuclear Limited under the terms of the 1976 loan agreement. The balance due under this loan agreement at December 31, 1978 amounted to 1,954,500 pounds U_3O_8 . Also, Agnew Lake has delivery commitments of 1,190,000 pounds U_3O_8 to customers during the period 1979 to 1982. In order to meet all of these commitments, the Company has arranged to purchase 500,000 pounds of U_3O_8 which will be used for delivery commitments coming due in 1979.

During the second half of 1978, Esso Resources Inc., a wholly-owned subsidiary of Imperial Oil Limited, signed an agreement permitting Esso to farm-in to the interests of Noranda Mines Limited and Agnew Lake Mines Limited in the oil and natural gas acreage held by Canadian Hunter Exploration Ltd. in Alberta, British Columbia and Saskatchewan. Esso is committed to spend \$50 million initially and, has two options to commit a further \$100 million, for a total of \$150 million, over a 30 month period from August 1, 1978 and, thereby earn up to a 12.5% interest in Hunter

holdings in the Elmworth and Wapiti areas of Alberta and, up to 17.5% of all other acreage held by Hunter. Esso may spend an additional \$29 million under various option agreements that do not alter its final interest in the lands. If Esso earns to its maximum limit, Agnew Lake's 15% interest in the Hunter properties will be reduced to 12.9% in the Elmworth-Wapiti acreage and 12.1% in the balance of the properties.

The major portion of land acquisition and exploratory drilling activity continued to be concentrated in the Elmworth area and adjacent Deep Basin areas in Alberta and British Columbia. Hunter now has 49 gas wells along the main Elmworth-Wapiti productive trend extending about 40 miles eastward from the Alberta-British Columbia border. As well as further defining the continuity of the Cretaceous Falher gas reservoir, this drilling began delineation of a number of other gas productive horizons both above and below the Falher. These additional zones are expected to contribute significantly to the ultimate reserves established in this area. In the Gold Creek-Karr area, about 50 miles southeast of Elmworth, a Cretaceous Gething wet gas accumulation is now in the initial development phase and, gas sales could commence as early as 1980 or 1981, dependent upon export approval.

At Elmworth-Wapiti, gas sales to TransCanada Pipelines for the domestic market are scheduled to commence on November 1, 1979, with an initial 30 million cubic feet per day average contract quantity in each of the Elmworth and Wapiti field sectors. Excellent production rates have been established on Falher gas wells completed to date and only 6 or 7 wells will be needed in each contract sector to meet this initial volume requirement. Gathering system construction is completed at Elmworth and is in progress at Wapiti. The Elmworth liquids recovery plant and

Directors' Report to the Shareholders (continued)

similar facilities at Wapiti will be completed by the autumn of 1979.

Additional gas wells were drilled and put on production at Keg River in northern Alberta and at Kobes, Townsend, Dahl and Julienne in British Columbia. Development drilling continued on heavy oil properties in the Lloydminster area.

During the year, Canadian Hunter participated in the drilling of 157 exploration and development wells which resulted in production capability being found in 54 oil wells and 74 gas wells, giving an overall drilling success ratio of 82 percent.

Net oil production averaged 996 barrels per day. Average gas production was 12.5 net million cubic feet per day.

Net oil reserves at year end were 4.5 million barrels proven and 10.7 million barrels proven plus probable. Net gas reserves were 329 billion cubic feet proven and 573 billion cubic feet proven plus probable. Net land holdings were 1.8 million net acres.

Agnew Lake's share of expenditures during 1978 amounted to \$8.9 million, bringing the cumulative investment in the Canadian Hunter properties to \$29.6 million at December 31, 1978.

An evaluative study on the 60% owned Grum Joint Venture zinc-lead-silver deposit, situated near Faro in the Yukon, which was commenced in May 1977, was suspended in February 1978, as it became apparent that the development of the property as a separate production facility would not be economic at existing metal prices. By agreement dated January 31, 1979, Cyprus Anvil Mining Corporation has agreed to acquire all of Kerr Addison's and Canadian Natural Resources' (40% owner of the Grum property) property interests in the area, as well as Kerr Addison's 70% equity interest in its subsidiary, Vangorda

Mines Limited. The total property interests involve 300 mining claims, fractions and leases in the Anvil District, including the Grum, Vangorda, and Swim Lake properties. Mineral reserves totalling 40 million metric tonnes have been indicated on the properties.

Kerr Addison and Canadian Natural Resources will also retain a 5% net profits interest in certain of the properties, following recovery of related acquisition and capital costs, including interest.

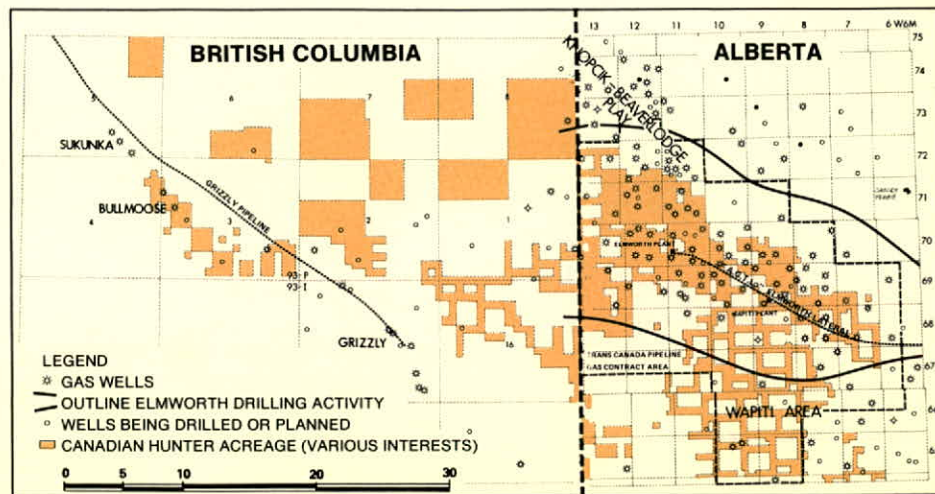
The agreement is subject to the tendering of at least 90% of the shares of Vangorda Mines Limited and, to review under the Foreign Investment Review Act. If concluded, Kerr Addison's cash consideration would be \$13.8 million and, the gain on sale is estimated to be approximately \$3.9 million, net of taxes.

During the coming year, improvements in productivity at the Agnew Lake property will continue to be the centre of the Company's attention.

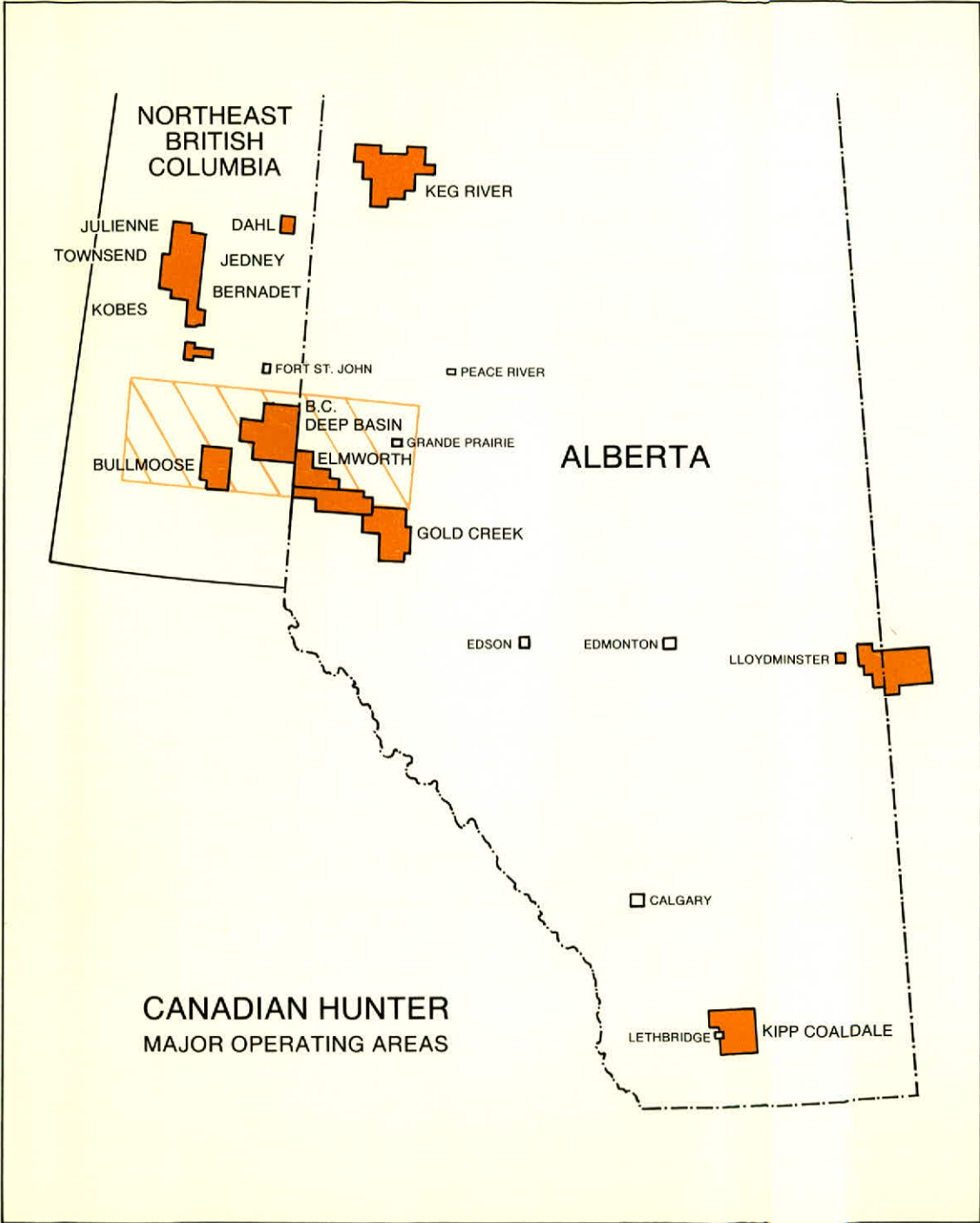
On behalf of the Board,

William James,
President.

Toronto, Canada
February 16, 1979.



CANADIAN HUNTER EXPLORATION LTD.
ELMWORTH — WAPITI PRODUCTION TREND



**Kerr
Addison
Mines
Limited**

**Report on
Mining Operations**

KERR ADDISON MINE

The Kerr Addison gold mine located at Virginiatown, Ontario, produced 256,182 tons of ore at an average daily rate of 702 tons with an average grade of 0.33 ounces per ton. Production amounted to 83,217 ounces of gold with a value of \$19.0 million.

Stope operations were confined between the 2500 and 4200 foot levels. Square-set methods accounted for 58% of the tonnage broken with shrinkage and blast hole mining providing 26%. The balance came from cut-and-fill operations. In spite of higher labour and supply costs, production costs per ton of ore decreased slightly from last year while the cost per ounce increased 34% due to the lower grade of ore treated.

Mineable ore reserves, including dilution allowance, at December 31, 1978 were estimated at 323,037 short tons with a grade of 0.37 ounces per ton.

The total work force at the property was reduced from 392 to 379 at year-end.

**MOGUL OF IRELAND LIMITED
(Kerr Addison 75% Interest)**

Due to the restricted zinc market which was developing at the end of 1977, production for the past year at the Mogul mine, located in County Tipperary, Republic of Ireland, was reduced by approximately 22% to 721,916 tons averaging 2.88% lead and 5.92% zinc from which 13,781 tons of lead and 36,379 tons of zinc were produced in concentrates resulting in recoveries of 66.7% and 85.2% for lead and zinc, respectively.

In an effort to minimize losses as a result of reduced production and depressed metal prices, exploration and mine development were cut back during most of the year. Surface diamond drilling on the mine property amounted to 2,792 feet comprising 8 hole completions, all of which were on the "K" Zone, delineating the ore zone for underground development.

Mine development continued at a reduced rate in the pillar recovery areas of the upper "G" Zone and in the trackless down-dip extensions of the "G" and "B" Zones. Development of the "K" Zone, deferred at the end of 1977, was recommenced late in the year with the driving of a ventilation raise through to surface. Total development advance was 11,274 feet. Underground diamond drilling totalled 15,364 feet.

Total ore broken from all sources amounted to 697,773 of which 70% came from the trackless areas. Pillar recovery accounted for 23%. Long hole drilling amounted to 171,219 feet. Backfill placed underground totalled 100,920 tons.

Substantial cost reduction during the year was accomplished by the elimination of overtime and a reduction in the work force. While total operating expenditures including exploration and marketing expense were considerably below that for last year, costs per ton of ore milled increased only 6% on 22% lower production. Expenditures on labour and related benefits decreased 13% and accounted for 52% of direct operating costs. The inflation rate in Ireland was 7.9% compared to 10.8% for 1977.

Mineable ore reserves with dilution at the year-end were as follows:

Proven Ore	S.D.T.	% Lead	% Zinc
Upper "G":	919,904	2.01	7.70
Lower "G":	158,438	3.77	3.01
"B" Zone:	1,720,660	3.24	4.59
Broken:	17,800	2.07	5.56
	<u>2,816,802</u>	<u>2.86</u>	<u>5.52</u>
Probable Ore			
"K" Zone:	<u>500,000</u>	<u>1.62</u>	<u>4.92</u>
Total Proven and Probable	<u>3,316,802</u>	<u>2.67</u>	<u>5.43</u>
Possible Ore			
Upper "G":	166,124	1.35	7.73
"B" Zone:	141,958	4.84	3.12
"K" Zone:	674,894	1.98	5.04
	<u>982,976</u>	<u>2.28</u>	<u>5.21</u>
Total Reserves	<u>4,299,778</u>	<u>2.58</u>	<u>5.38</u>

The number of employees at year-end was 498, amounting to an 11% reduction from last year. All labour agreements remain in good standing to the end of the current National Wage Agreement which expires May 31, 1979.

**AGNEW LAKE JOINT VENTURE
(Kerr Addison 90% Interest)**

During 1978, 400,000 pounds of U₃O₈ were produced of which 250,000 pounds came from the surface leach pile and the balance from underground stopes.

Development amounted to 35,100 feet of trackless drives, 3,430 feet of conventional

and 1,510 feet of bored raising, for a total advance of 40,040 feet.

The mineable proven and probable ore reserves with dilution including broken ore were estimated at December 31, 1978 to be 11,150,000 tons at a grade of 0.83 pounds U_3O_8 per ton.

Long hole drilling for production and other purposes totalled 645,000 feet making available 1,263,000 tons of which 1,219,400 were blasted. Tons of ore and waste hoisted were 405,000 and 325,000 respectively. Underground ventilation capacity was increased to 400,000 C.F.M. and this figure will be doubled in early 1979.

Problems in underground leaching of ore were encountered early in the year when it became evident that the broken ore in the stopes against the hanging wall was not being properly wetted. To accomplish the complete wetting of the broken ore, a method of flood leaching as opposed to trickle leaching was adopted, necessitating extensive bulkhead construction to confine the leach solutions within the stopes. A modification of mine planning for future stoping was also required. This change in planning has set back the mining schedule and restricted the quantity of broken ore available for leaching.

Due to the lower than expected grade of the pregnant leach solutions, it was necessary to install a third ion exchange set. This set is of a modified design and simpler to operate. Similar modifications are being made to the original sets. Polythionates were a serious problem during the first half of the year causing extensive corrosion

and fouling of the ion exchange resin. The corrosion problem was overcome by fiberglass linings and the utilization of plastic in place of stainless steel. Additionally, better understanding of the leaching chemistry and control of same has greatly reduced the possibility of the formation of polythionates in the future. As a result of numerous alterations and improvements affected during the year, the plant is currently operating at a high efficiency with more than adequate availability.

All environmental standards, both in the mine and on surface, were maintained within acceptable limits throughout the year.

On November 1, 1978, the Company took over all underground functions previously performed by contractors. The United Steelworkers of America applied for and received certification to act as bargaining agent for the Agnew Lake unit. The total work force at year-end was 534.

BLUE HILL JOINT VENTURE (Kerr Addison 60% Interest)

The mining and milling plant located near Blue Hill, Maine, was retained on a care and maintenance basis. All concentrate inventories on hand at the end of 1977 were sold. Work continued throughout the year on the tailings pond and local drainage basin to improve environmental acceptability.

EXPLORATION

Exploration emphasis in 1978 shifted towards property situations, where costs were shared on a joint basis and, away from regional or "grass roots" projects.

The exploration department managed project expenditures of \$3,033,000 of which approximately one-third was recovered from joint venture participants.

Twenty-four percent of the total was spent in the United States and approximately fifty percent of the U.S.A. expenditures were on the Fernandez Joint Venture in New Mexico. Seventy-six percent of the total was spent in Canada on uranium projects in the provinces of British Columbia, Saskatchewan and Ontario, on gold exploration in Ontario, and on base metal exploration in British Columbia and the Yukon Territory.

The first drill hole on the Amalgamated Larder Mines Limited optioned property near Larder Lake, Ontario, drilled in December 1978, intersected a gold bearing zone at a vertical depth of 2,150 feet below the old Cheminis shaft collar. Assay results from an intersection length of 22.2 feet averaged 0.2 ozs. gold per ton. Subsequent to the year-end, a second hole located 2,500 feet to the west, was completed to a depth of 2,403 feet and did not intersect significant mineralization. A third hole, located 500 feet east of the first hole has just commenced drilling.

Respectfully submitted,

P. S. Cross,
Executive Vice-President.

Toronto, Canada
February 15, 1979

**Kerr
Addison
Mines
Limited**

(Incorporated under the laws of Ontario)

**Consolidated
Balance Sheet**

December 31, 1978
(with comparative figures at
December 31, 1977)

A S S E T S	1978	1977
Current:		
Cash, term deposits and short-term notes	\$ 4,921,000	\$ 7,857,000
Marketable securities and short-term investments, at cost (quoted market value 1978 — \$3,546,000; 1977 — \$9,294,000)	3,111,000	9,297,000
Concentrates, bullion and metals awaiting settlement, in transit and on hand	13,795,000	15,820,000
Accounts and interest receivable	2,408,000	14,585,000
Supplies and materials, at cost	3,098,000	3,839,000
Prepaid expenses	232,000	283,000
Total current assets	27,565,000	51,681,000
Investments:		
Other mining companies, at cost (note 5)	23,250,000	27,361,000
Sundry, at cost	811,000	840,000
	24,061,000	28,201,000
Fixed:		
Property, plant and equipment, at cost	45,678,000	45,423,000
Less accumulated depreciation and depletion	32,205,000	29,835,000
	13,473,000	15,588,000
Deferred exploration and development expenditures:		
Agnew Lake property (note 2)	77,733,000	61,718,000
Gas and oil properties (note 4)	29,630,000	20,753,000
Grum Project (note 8)	8,112,000	7,906,000
Other	642,000	637,000
	116,117,000	91,014,000
Other:		
Proceeds from sale of borrowed uranium concentrates, in escrow (note 2(b))	44,465,000	34,065,000
	<u>\$225,681,000</u>	<u>\$220,549,000</u>

(See accompanying notes to consolidated financial statements)

LIABILITIES

1978

1977

	1978	1977
Current:		
Bank loan	\$ 12,860,000	\$ 28,000,000
Accounts payable and accrued charges	12,740,000	8,463,000
Income and mining taxes payable	2,942,000	6,357,000
Total current liabilities	28,542,000	42,820,000
Provision for environmental costs (note 7(b))	2,000,000	2,000,000
Deferred income taxes	10,697,000	8,092,000
Deferred revenue (note 2(c))	88,102,000	76,187,000
Minority interest in subsidiaries	1,742,000	1,745,000
Shareholders' equity:		
Share capital (note 6)	41,566,000	41,550,000
Retained earnings	53,032,000	48,155,000
	94,598,000	89,705,000
	<u>\$225,681,000</u>	<u>\$ 220,549,000</u>

On behalf of the Board: William James, Director P. S. Cross, Director

Auditors' Report

To the Shareholders of Kerr Addison Mines Limited:

We have examined the consolidated balance sheet of Kerr Addison Mines Limited as at December 31, 1978 and the consolidated statements of operations, retained earnings and changes in financial position for the year then ended. Our examination of the financial statements of Kerr Addison Mines Limited and those subsidiaries of which we are the auditors was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances. We have relied on the report of the auditors who have examined the financial statements of a subsidiary company, Mogul of Ireland Limited.

In our opinion, subject to the satisfactory resolution of the matters referred to in note 2(a) and in note 3, these consolidated financial statements present fairly the financial position of the company as at December 31, 1978 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 12, 1979.

**Kerr
Addison
Mines
Limited**

**Consolidated
Statement of
Operations**

For the year ended
December 31, 1978
(with comparative
figures for 1977)

	1978	1977
Mine operations:		
Value of production	\$ 40,771,000	\$ 44,460,000
Cost of metal production	28,645,000	30,120,000
	12,126,000	14,340,000
Dividends and interest income (net, in 1977, of interest expense of \$120,000)	3,769,000	3,262,000
	15,895,000	17,602,000
Deduct (add):		
Administrative and general expenses	576,000	610,000
Outside exploration expenses	2,017,000	2,123,000
Depreciation and depletion	2,568,000	3,246,000
Income and mining taxes	3,627,000	4,823,000
Minority interest in profits of subsidiary companies	81,000	692,000
Foreign currency translation gain	(418,000)	(584,000)
	8,451,000	10,910,000
Profit before the following	7,444,000	6,692,000
Add (deduct):		
Gain on sale of investments and fixed assets (net of income taxes 1978 — \$350,000; 1977 — \$255,000)	2,205,000	1,406,000
Write-down in carrying value of property, plant and equipment		(512,000)
Provision for environmental costs (net of income taxes — \$600,000)		(1,400,000)
Net income for the year	\$ 9,649,000	\$ 6,186,000
Net income per share	\$1.01	\$.65

(See accompanying notes to consolidated financial statements)

Consolidated Statement of Retained Earnings

For the year ended December 31, 1978 (with comparative figures for 1977)

	1978	1977
Balance, beginning of year	\$ 48,155,000	\$ 46,741,000
Add net income for the year	9,649,000	6,186,000
	57,804,000	52,927,000
Deduct dividends (50¢ per share)	4,772,000	4,772,000
Balance, end of year	<u>\$ 53,032,000</u>	<u>\$ 48,155,000</u>

Consolidated Statement of Changes in Financial Position

For the year ended December 31, 1978 (with comparative figures for 1977)

	1978	1977
Source of funds:		
Net income for the year	\$ 9,649,000	\$ 6,186,000
Add charges to income not requiring an outlay of funds in the current period —		
Depreciation and depletion	2,568,000	3,246,000
Other non-fund items (net)	1,239,000	3,952,000
Funds from operations	13,456,000	13,384,000
Proceeds on sale of uranium concentrates (net, in 1978 of \$2,097,000 of borrowed concentrates repaid) (note 2(b))	11,915,000	52,367,000
Proceeds on sale of investments and fixed assets	5,042,000	235,000
Proceeds on sale of 63.3% interest in Joutel Copper Mines Limited of \$93,000 less working capital sold of \$37,000	56,000	
Reclassification (net) of investments as between other mining companies and marketable securities and short-term investments	483,000	
Decrease in sundry investments	29,000	179,000
Issue of shares for cash (note 6(b))	16,000	61,000
	30,997,000	66,226,000
Application of funds:		
Proceeds on sale of uranium concentrates placed in escrow (net, in 1978 of \$2,120,000 released on repayment of borrowed concentrates) (note 2(b))	10,400,000	34,065,000
Expenditures on Agnew Lake property (net) (note 2(a))	16,015,000	27,845,000
Expenditures on gas and oil properties (note 4)	8,877,000	20,753,000
Dividends	4,772,000	4,772,000
Deferred exploration and development expenditures — Grum Project and other	211,000	1,043,000
Additions to property, plant and equipment	488,000	1,022,000
Decrease in minority interest in subsidiaries	72,000	784,000
	40,835,000	90,284,000
Decrease in working capital	(9,838,000)	(24,058,000)
Working capital, beginning of year	8,861,000	32,919,000
Working capital (deficiency), end of year	<u>\$ (977,000)</u>	<u>\$ 8,861,000</u>

(See accompanying notes to consolidated financial statements)



**Notes to
Consolidated
Financial
Statements**

December 31, 1978

1. Summary of significant accounting policies

(a) Basis of presentation of financial statements —

The accompanying financial statements include, on a consolidated basis, the accounts of Kerr Addison Mines Limited and its subsidiary companies (some of which are non-operating):

	<u>Percentage ownership</u>
Agnew Lake Mines Limited	100%
Keradamex, Inc.	100%
Kerramerican, Inc.	100%
Normetal Mines Limited	100%
Quemont Mines Limited	100%
Mogul of Ireland Limited	75%
Vangorda Mines Limited	70.1%

The Blue Hill (60% interest) and Icon Sullivan (21.4% interest) joint ventures, both of which are now inactive, are included in the consolidated accounts on the basis of the company's proportionate share of the assets, liabilities, revenues and expenses relating thereto.

(b) Exchange translation —

The financial statements of companies outside of Canada have been translated into Canadian dollars as follows: current assets and current liabilities at exchange rates prevailing at the year-end; fixed assets, depreciation and depletion provisions on the basis of rates prevailing at dates of acquisition, and income and expenses (other than depreciation and depletion) at average rates during the year. Exchange gains or losses resulting from such translation practices are reflected in the consolidated statement of operations.

(c) Concentrates, bullion and metals —

Consistent with industry practice, the company records as revenue the value of production of concentrates, bullion, and metals awaiting settlement, in transit and on hand at estimated net returns under sales contracts.

(d) Property, plant and equipment —

Additions to property, plant and equipment are recorded at cost and include previously deferred exploration and development expenditures on properties which have been brought into production. Depreciation and depletion thereon is provided at rates designed to write off the costs over their estimated useful lives which, in the case of property, plant and equipment of Mogul of Ireland Limited have been determined on units of production based on estimated reserves. Substantially all other fixed assets are being depreciated in equal annual amounts over their estimated useful lives.

(e) Exploration and development expenditures —

Minerals —

Mineral exploration and development expenditures are charged against current earnings unless they relate to interests in properties where the reserves have the potential of being economically recoverable, in which case the expenditures are deferred. Upon disposal or abandonment of such interests, the net gain or loss is reflected in the consolidated statement of operations. If the properties are brought into production, deferred exploration and development expenditures relating thereto are reclassified with property, plant and equipment and amortized as explained in note 1(d).

Gas and oil —

During 1977, Agnew Lake earned an interest in certain gas and oil properties through a joint venture agreement with Noranda Mines Limited.

The company has adopted the full cost method of accounting for its gas and oil activities through the joint venture, whereby all costs relating to the exploration for and development of gas and oil reserves are capitalized. Such costs include lease acquisition costs, geological and geophysical

expenses, carrying charges on non-producing properties and costs of drilling both productive and non-productive wells.

Substantially all of the gas and oil properties held by the joint venture are considered by management to be in the exploratory or development stage and accordingly, all expenditures (less revenues) incurred to December 31, 1978, including interest on funds borrowed to finance the company's participation, are deferred in the consolidated accounts. These costs will be amortized to income by the unit of production method based on estimated proven gas and oil reserves once a commercial level of production is attained.

	Balance January 1, 1978	Additions during the year	Balance December 31, 1978
Expenditures on property, plant and equipment	\$23,623,000	\$ 2,643,000	\$26,266,000
Expenditures for exploration, development and other expenditures	37,101,000	25,292,000	62,393,000
Interest (net of interest earned on escrowed funds)	<u>3,889,000</u>	<u>4,250,000</u>	<u>8,139,000</u>
	64,613,000	32,185,000	96,798,000
Less value of uranium produced during preproduction period	<u>2,895,000</u>	<u>16,170,000</u>	<u>19,065,000</u>
	<u>\$61,718,000</u>	<u>\$16,015,000</u>	<u>\$77,733,000</u>

(f) Income taxes —

The company follows the tax allocation method of accounting for income taxes. Under this method, timing differences between reported and taxable income (relating primarily to exploration and development expenditures claimed for tax purposes in excess of amounts written off in the accounts and capital cost allowances claimed for tax purposes in excess of depreciation recorded in the accounts) result in deferred income taxes.

Agnew Lake's 90% share of 1979 expenditures on property, plant and equipment and for exploration, development and other expenditures is budgeted at \$30,000,000 (1978 actual expenditures \$27,935,000), excluding interest and before deducting the value of uranium to be produced in 1979.

Production during 1978 amounted to 400,000 pounds of U₃O₈, of which 250,000 pounds came from the surface leach pile and the balance from underground stopes. The solution distribution method which had been designed for extracting uranium from stopes, required major modifications to a flood leaching system during 1978, restricting production from underground. These modifications had been completed on existing stopes by year end, but have delayed the preparation of new stopes for leaching. As a result, the rate of extraction of uranium from broken ore under actual operating conditions has not, to date, duplicated the original test results upon which the design of the operation was based. Production is expected to gradually increase as more stopes are available for flood leaching to provide adequate uranium and retention time to build-up and maintain the grade of solution feed to the mill.

To date yields of uranium concentrate from the extraction process being employed have been substantially less than the level required to ensure recovery, through profitable operations, of costs expended to date and still to be incurred, or to discharge the obligations set out in note 2(b) and (d) below. The recovery of such costs and the discharge of these obligations will be dependent on

2. **Agnew Lake**

(a) Agnew Lake Joint Operation, in which Agnew Lake Mines Limited ("Agnew Lake") has a 90% interest, commenced development, in 1976, of a production unit with an estimated annual capacity of 1,000,000 pounds of uranium concentrate at its Agnew Lake property. It was estimated at that time that production would commence by mid-1977 and that Agnew Lake's share of total preproduction costs would amount to approximately \$47,400,000.

As of December 31, 1978, due to development and related problems, the project has not yet achieved a commercial level of production. Agnew Lake's share of accumulated preproduction expenditures, all of which have been deferred, now total \$77,733,000 and consist of the following:

Kerr Addison Mines Limited

Notes to Consolidated Financial Statements (continued)

the company's ability to increase the yields of uranium concentrates to required levels.

Management believes that production can be increased significantly from the level obtained in 1978. However because of the complexities of the process, and problems experienced to date, it is not possible to state at this time that the required levels referred to above will be attained.

- (b) During the year Agnew Lake borrowed, and delivered to its customers, an additional 260,000 pounds of uranium concentrate from Eldorado Nuclear Limited ("Eldorado") under the terms of a 1976 loan agreement. Previous borrowings and deliveries under this agreement amounted to 600,000 pounds of concentrate in 1976 and 1,140,000 pounds of concentrate in 1977, bringing the total uranium concentrates borrowed from Eldorado and delivered to customers to 2,000,000 pounds. However, during the year Agnew also repaid 45,500 pounds of concentrate to Eldorado, leaving a balance at December 31, 1978 of 1,954,500 pounds to be repaid to Eldorado. Agnew has four years from the dates of delivery to return, in kind, the remaining borrowed concentrates.

Under the terms of the agreement, Agnew Lake must pay interest on the loan value of borrowed concentrate (the loan value being the price at which it sold the concentrate to its customers) at a rate equal to that charged from time to time by the Federal Government on five-year loans to Crown corporations (currently 10½%). The agreement also provides that proceeds from the sale of borrowed concentrates, in excess of 1,000,000 pounds, be placed in escrow with a Canadian chartered bank until such concentrate is returned in kind. At December 31, 1978 a total of \$44,465,000 was lodged with a bank in the form of term deposits and is included in the consolidated balance sheet as a non-current asset.

The interest payable to Eldorado under the loan agreement is recorded as a preproduction cost while interest received by Agnew Lake, from the funds in escrow, is applied as a credit to preproduction costs.

If Agnew Lake should be unable to meet its obligations to return the borrowed concentrate in kind, Eldorado may purchase concentrate from an outside party and Agnew Lake must reimburse Eldorado for all costs related to the purchase. As collateral for the loan, Agnew Lake has given Eldorado a debenture of \$200 million which is

secured by a fixed and floating charge on all of its assets and undertakings. Agnew Lake's assets amounted to \$165,699,000 at December 31, 1978.

Kerr Addison Mines Limited has guaranteed all obligations of Agnew Lake under this loan agreement. As part of the guarantee, Kerr Addison Mines Limited has agreed to deposit up to a maximum of 1,300,000 shares of Noranda Mines Limited with a trustee as security for repayment by Agnew Lake of its commitments under the loan agreement described above. The number of shares to be lodged is dependent upon the loan value of borrowed concentrate and the market value of Noranda shares. At December 31, 1978 the maximum 1,300,000 shares of Noranda were lodged with a trustee.

- (c) The proceeds from the sale of borrowed concentrates are included in the consolidated balance sheet at December 31, 1978 as deferred revenue in the amount of \$88,102,000. After Agnew Lake commences commercial production, the deferred revenue less production costs will be included in operations as the borrowed concentrate is repaid.
- (d) In addition to its obligation to return the 1,954,500 pounds of borrowed concentrate to Eldorado, Agnew Lake has firm commitments to deliver 1,190,000 pounds of uranium concentrate to customers during the period 1979-1982. In this connection during 1978, Agnew entered into an agreement with a producer to purchase, in 1979, 500,000 pounds of uranium concentrate for delivery to customers under sales commitments coming due during 1979.

3. Mogul of Ireland Limited

The remaining life of this subsidiary's mine, based on current reserves, is estimated to be between four to six years. On the basis of present cost projections and reserves, the level of prices for zinc and lead which existed during 1978 is not sufficient to cover total projected costs of mining, including depreciation, depletion and amortization and estimated mine closure costs. The recovery of the carrying value of the company's 75% share of Mogul's assets, net of liabilities (included in the consolidated balance sheet at December 31, 1978 at approximately \$7,500,000) will be dependent, among other things, on the level of metal market prices to be realized during the mine's remaining life.

4. Gas and oil properties

In 1977, Agnew Lake entered into a joint venture with Noranda Mines Limited ("Noranda") and Petromark Minerals Ltd. whereby it acquired a 15% interest in gas and oil properties in Alberta, British Columbia and Saskatchewan held by Canadian Hunter Exploration Ltd. ("Canadian Hunter") as trustee. Under the terms of the joint venture agreement, Agnew Lake must contribute its share of future expenditures on the properties in order to maintain its percentage interest therein.

During the year the joint venture entered into an agreement under which Esso Resources will farm-in to the interests of Agnew Lake and Noranda in these properties. If Esso earns its entire interest, it will have 12.5% in Canadian Hunter's Elmworth-Wapiti acreage in Alberta and 17.5% of Canadian Hunter's other acreage in return for expenditures of up to \$179 million. In this event Agnew Lake's interest in the Canadian Hunter properties will be reduced to 12.9% in the Elmworth-Wapiti acreage and 12.1% in the balance of the properties.

Agnew Lake's interest in these gas and oil properties is included in the consolidated balance sheet as deferred exploration and development expenditures which comprise:

	Balance January 1, 1978	Changes during the year	Balance December 31, 1978
Expenditure (net) to acquire original interest	\$19,750,000		\$19,750,000
Share of additional joint venture expenditures	<u>1,259,000</u>	<u>\$ 8,728,000</u>	<u>9,987,000</u>
	21,009,000	8,728,000	29,737,000
Share of proceeds on sale of property interest	(990,000)	(1,530,000)	(2,520,000)
Share of net production revenues	<u>(302,000)</u>	<u>(795,000)</u>	<u>(1,097,000)</u>
	19,717,000	6,403,000	26,120,000
Bank interest	<u>1,036,000</u>	<u>2,474,000</u>	<u>3,510,000</u>
	<u>\$20,753,000</u>	<u>\$ 8,877,000</u>	<u>\$29,630,000</u>

5. Investments in other mining companies

These investments represent shares of other mining companies which are being held on a relatively long-term basis and which, at December 31, 1978, are stated after reclassifying certain shares (net) as between long-term investments and marketable securities and short-term investments.

These investments have aggregate quoted market values of approximately \$63,117,000 at December 31, 1978 and \$47,728,000 at December 31, 1977 (computed by pricing the individual holdings at the closing market quotations). Included in this category at December 31, 1978 are 1,708,000 shares of Noranda Mines Limited (after giving effect to the conversion into 108,000 shares of Noranda Mines Limited of shares previously held in Orchan Mines Limited) carried at a cost of \$22,515,000; (December 31, 1977 — 1,600,000 shares carried at a cost of \$21,727,000). The market values of these investments do not necessarily represent the value of these holdings, which may be more or less than that indicated by the market quotations.

At December 31, 1978, 1,300,000 shares of Noranda Mines Limited had been pledged as security for repayment, by Agnew Lake Mines Limited, of its obligation under the loan agreement outlined in note 2(b).

6. Share capital

(a) Details of share capital are as follows:

	Number of shares	
	1978	1977
Authorized —		
Class A shares without par value	11,500,000	
Class B shares without par value	999,000	
Common shares without par value	1,000	
	<u>12,500,000</u>	
Issued and outstanding —		
Class A	9,063,524	9,000,386
Class B	<u>481,425</u>	<u>543,063</u>
	<u>9,544,949</u>	<u>9,543,449</u>

The Class A and Class B shares are interchangeable one to another and participate equally with the common shares as to dividends and in all other respects. The only distinction is that for Class B shares, until December 31, 1978, the directors could provide for the payment, in whole or in part, of a cash dividend out of 1971 capital surplus on hand (as defined in the Income Tax Act).

As a result of amendments to the Income Tax Act (Canada), as of January 1, 1979, the company will no longer be able to pay dividends out of 1971 capital surplus on hand (as defined).

Kerr Addison Mines Limited

Notes to Consolidated Financial Statements (continued)

- (b) In 1978, 1,500 Class A shares were issued under the company's stock option plan for \$16,000 cash. At December 31, 1978, options on 86,700 shares were outstanding, exercisable at prices varying from \$8.14 to \$13.42 for periods up to 1988.

7. Contingent liabilities

- (a) The company along with Agnew Lake Mines Limited is a defendant in an action commenced in the Supreme Court of Ontario by Q.M.G. Holdings Inc. arising from the sale in 1974 by Q.M.G. Holdings Inc. to Kerr Addison Mines Limited of its 10% share interest in Agnew Lake Mines Limited. Q.M.G. Holdings Inc. claims damages in excess of \$13,500,000 for alleged misrepresentation. The company is defending the action and in the opinion of Counsel the company has a good defence to the action on the merits.
- (b) Government environmental legislation and regulations may require that the company incur future expenditures for the rehabilitation of mining properties that have been closed. It is still not possible to develop specific plans for such rehabilitation or costs related thereto. In 1977, a provision of \$1,400,000 (net of related deferred income taxes of \$600,000) was included in the consolidated statement of operations.

No significant expenditure was made during 1978 or is expected for 1979 and accordingly this provision is included in the consolidated balance sheet as a non-current liability.

8. Subsequent event

The company has entered into an agreement dated January 31, 1979 with Cyprus Anvil Mining Corporation to sell certain mining claims in the Yukon, including claims on the Grum and Swim Lake properties, as well as its 70% interest in Vangorda Mines Limited. This agreement is subject to review under the Foreign Investment Review Act. If the sale is approved, the gain on this transaction is estimated at approximately \$3,900,000 (net of related taxes).

9. Statutory information

- (a) Total direct remuneration paid by the company and its subsidiaries to directors and senior officers during the year ended December 31, 1978 amounted to \$402,000 (\$426,000 in 1977).
- (b) Included in accounts and interest receivable at December 31, 1978 are housing loans aggregating \$26,000 to certain officers of the company.

