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# Giant

YELLOWKNIFE MINES LIMITED

ANNUAL REPORT 1977

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## REVIEW IN BRIEF

	<u>1977</u>	<u>1976</u>
Ore milled, tons . . . . .	446,192	428,154
Grade of mill feed, ounces per ton . . . . .	0.271	0.281
Gold recovered, ounces . . . . .	106,143	106,714
Gross value of production	\$17,496,000	\$13,138,000
Operating income before write-offs . . . . .	4,390,000	807,000
Exploration expenditures	340,000	522,000
Income taxes . . . . .	838,000	99,000
Net income (loss) . . . . .	2,451,229	(186,000)
Earnings (loss) per share	0.57	(0.04)
Dividends paid per share . . . . .	0.15	0.10
Capital expenditures . . . . .	578,000	1,254,000
Working capital at end of year . . . . .	8,838,000	6,527,000
Average price received per oz. of gold . . . . .	\$164.00	\$122.00

**ANNUAL MEETING OF SHAREHOLDERS**  
 Wednesday, April 12, 1978 at 11:00 a.m. (E.S.T.)  
 Library, Royal York Hotel,  
 Toronto, Canada.

# Giant

YELLOWKNIFE MINES LIMITED

## 35th Annual Report



*Mine Site*



*Inspection by Giant Directors*



*Exploration Camp  
MacKenzie Mountain, N.W.T.*

Head Office: P.O. Box 40, Commerce Court West, Toronto  
Mine Office: Yellowknife, N.W.T.

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## DIRECTORS

A. J. ANDERSON  
Consulting Mining Engineer

C. R. ARCHIBALD  
Partner, Law Firm of  
Strathy, Archibald & Seagram

\*A. C. CALLOW  
Retired

D. J. EMERY  
President and Managing Director  
of the Corporation

E. L. HEALY  
President and Chief Executive Officer,  
Falconbridge Engineering and Development  
Incorporated

W. F. JAMES  
Partner, James & Buffam,  
Consulting Geologists

G. P. MITCHELL  
Vice-President of the Corporation and  
Group Vice-President  
Falconbridge Nickel Mines Limited

\*J. R. SMITH  
Retired

\*J. D. STREIT  
Geologist, President,  
Yellowknife Bear Mines Ltd.

\*Members of the Audit Committee

## OFFICERS

D. J. EMERY  
President and Managing Director  
of the Corporation

G. P. MITCHELL  
Vice-President of the Corporation  
and Group Vice-President  
Falconbridge Nickel Mines Limited

W. R. ROBERTSON  
Secretary of the Corporation and  
other Companies associated with  
Falconbridge Nickel Mines Limited

N. H. WITHERELL  
Treasurer of the Corporation and  
Treasurer,  
Falconbridge Nickel Mines Limited

W. F. AVERY  
Controller of the Corporation and  
other Companies associated with  
Falconbridge Nickel Mines Limited

## CONSULTANTS

F. G. T. PICKARD, Metallurgical  
L. A. WRIGGLESWORTH, Geological  
W. B. G. WALKER, Geological

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## TRANSFER AGENTS AND REGISTRARS

CROWN TRUST COMPANY  
302 Bay Street, Toronto, Ontario M5H 2P4

REGISTRAR AND TRANSFER COMPANY  
140 Cedar Street, New York, N.Y. 10006

## BANKERS

CANADIAN IMPERIAL BANK OF COMMERCE  
Toronto, Ontario

## AUDITORS

THORNE RIDDELL & CO.  
Toronto, Ontario

## SOLICITORS

STRATHY, ARCHIBALD & SEAGRAM  
Toronto, Ontario

## LISTED

Toronto Stock Exchange  
American Stock Exchange

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## REPORT OF THE DIRECTORS

To the Shareholders:

On behalf of the Board of Directors, we are pleased to submit the Corporation's thirty-fifth Annual Report and the Consolidated Financial Statements for 1977.

The Corporation's operations consist of gold mining and ore treatment at its property located at Yellowknife in the Northwest Territories of Canada. It also carries out the mining and treatment of ore from the properties of its subsidiaries, Lolor Mines Limited and Supercrest Mines Limited, owned 87.5% and 50% respectively. The Corporation also carried out exploration programs for minerals on outside properties.

A record tonnage of 446,000 tons was milled for the year, up from 428,000 tons in 1976. This was achieved by a heavy contribution from the open pits which amounted to 41% of the total tonnage. The average grade of ore milled in 1977 was 0.271 ounce of gold per ton compared with 0.281 in 1976. Although mill throughput increased, ounces of gold produced decreased by 571 ounces due to the lower grade of ore milled.

The upsurge in the price of gold in 1977 offset increased operating costs and lower gold production resulting in the highest net value of production in the Corporation's history of \$17,299,000\*. Net income for the year was \$2,451,000 compared with a loss in 1976 of \$186,000. The average price received for gold sold by the Corporation in 1977 was \$164.00 per ounce compared with \$122.00 per ounce in 1976.

An interim dividend of 15¢ per share was paid in December, 1977, being the first dividend by the Corporation since March, 1976.

This report provides, in tabular form, operations and financial information on a comparative basis for the past five years of operations, and a comparative statement of production and earnings for the whole of the production life of the mine, which commenced in 1948. The tables also indicate that both the level of the price of gold and the ability to mine and process profitably ore of low gold content are key factors not only in determining the level of earnings for the Corporation, but in also establishing ore reserves, and hence the life of the mine.

### ORE RESERVES

In estimating ore reserves at the end of each year, regard was given to the prevailing price of gold and to anticipated operating costs.

After mining 446,192 tons in 1977, ore reserves calculated at year-end were 1,004,000 tons at 0.34 oz. gold per ton, a decrease of 501,000 tons from the prior year-end. Although diamond drilling and the increased gold price enabled some additions to reserves, these were offset by losses due to lack of continuity during mining in some stoping blocks and reinterpretation of ore contours in other blocks. Only 74,000 new tons were outlined by diamond drilling.

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\* All amounts are expressed in Canadian currency except as otherwise designated.

## OPERATIONS AND FINANCIAL SUMMARY

	1977	1976	1975	1974	1973
<b>Giant</b>					
Ore milled, tons	393,178	393,730	341,761	254,918	271,350
Gold recovered, ounces	87,755	93,378	81,246	71,095	102,321
<b>Lolor</b>					
Ore milled, tons	7,663	5,877	18,338	25,460	57,737
Gold recovered, ounces	2,116	1,352	4,270	6,367	23,469
(87½ per cent owned by Giant Yellowknife Mines Limited)					
<b>Supercrest</b>					
Ore milled, tons	45,351	28,547	31,870	47,721	60,373
Gold recovered, ounces	16,272	11,984	12,921	24,052	32,503
(50 per cent owned by Giant Yellowknife Mines Limited)					
<b>Consolidated</b>					
Ore milled, tons	446,192	428,154	391,969	328,099	389,460
Average tons per day	1,222	1,173	1,074	899	1,067
Calculated millheads (oz. gold per ton)	0.27	0.28	0.29	0.36	0.46
Mill recovery, per cent	87.73	88.21	87.76	87.18	88.52
<b>Total recovery</b>					
Gold, ounces	106,143	106,714	98,437	101,514	158,293
Silver, ounces	22,809	25,157	21,473	21,378	32,690
<b>Consolidated Financial Summary</b>					
Net value of production	\$17,299,000	\$12,991,000	\$15,378,000	\$16,382,000	\$17,054,000
Operating and administrative costs	12,908,000	12,184,000	13,059,000	11,121,000	9,299,000
Operating profit before the underrated items	4,391,000	807,000	2,319,000	5,261,000	7,755,000
Depreciation, depletion and amortization	888,000	711,000	813,000	135,000	493,000
Exploration expenses	340,000	522,000	1,237,000	673,000	493,000
Operating income	3,162,000	(426,000)	269,000	4,453,000	6,769,000
Income from investments	468,000	(433,000)	(690,000)	(847,000)	(643,000)
Income taxes	838,000	99,000	394,000	1,735,000	2,412,000
Minority interest	341,000	94,000	260,000	786,000	729,000
Net income (loss)	\$ 2,451,229	\$ (186,000)	\$ 305,000	\$ 2,779,000	\$ 4,271,000
Earnings (loss) per share	.57	(.04)	.07	0.65	0.99
Dividends paid per share	.15	.10	.40	0.50	0.60
Working capital	\$ 8,838,325	\$ 6,527,000	\$ 7,803,000	\$10,308,000	\$ 9,972,000
Average price per ounce of gold	163.63	122.08	156.68	161.73	108.03
Operating costs per ton (before write-offs)	\$28.94	\$28.46	\$33.32	\$33.90	\$23.88

## TABLE SHOWING YEAR END ESTIMATES OF ORE RESERVES (000 tons)

	1977		1976		1975		1974		1973		1972	
	Tons	Grade Oz. Gold per ton	Tons	Grade Oz. Gold per ton	Tons	Grade Oz. Gold per ton	Tons	Grade Oz. Gold per ton	Tons	Grade Oz. Gold per ton	Tons	Grade Oz. Gold per ton
<b>Giant</b>												
Active stopes	460	0.36	609	0.34	1,137	0.33	1,453	0.33	886	0.35	475	0.51
Pillars	—	—	—	—	—	—	—	—	17	0.65	32	0.65
Other developed ore	283	0.30	406	0.36	260	0.33	266	0.32	88	0.45	24	0.59
Open pits	202	0.32	412	0.28	352	0.30	453	0.30	—	—	—	—
Total Giant	945	0.33	1,427	0.33	1,749	0.32	2,172	0.32	991	0.36	531	0.52
<b>Lolor</b>												
Active stopes	18	0.39	22	0.39	76	0.34	94	0.32	94	0.37	95	0.51
Pillars	—	—	—	—	—	—	—	—	—	—	—	—
Other developed ore	—	—	—	—	—	—	—	—	—	—	—	—
Total Lolor	18	0.39	22	0.39	76	0.34	94	0.32	94	0.37	95	0.51
<b>Supercrest</b>												
Active stopes	29	0.44	56	0.47	125	0.46	134	0.47	88	0.62	113	0.68
Pillars	—	—	—	—	—	—	—	—	—	—	—	—
Other developed ore	12	0.35	—	—	—	—	—	—	—	—	6	0.52
Total Supercrest	41	0.41	56	0.47	125	0.46	134	0.47	88	0.62	119	0.67
<b>Total developed ore</b>												
at year end	1,004	0.34	1,505	0.34	1,950	0.33	2,400	0.33	1,173	0.38	745	0.54

Exploration for additional ore is being concentrated at depth and at the north end of the property including Supercrest and Northbelt where potential remains favourable.

At depth, long holes are being drilled down from the 2000 level to test previously unexplored ground. One such hole was completed during 1977 and reached a depth of 2,700 feet. It encountered numerous short sections of favourable schist, but no significant gold values. A second hole was at 1,700 feet at year-end.

Down-hole drilling is also being done from the 1500-foot level in the central part of the mine where ore values have been found in a narrow structure extending below present working levels. Follow-up drilling from the 2000-foot level will be necessary to determine whether there is any persistence to this structure.

## OPERATING COSTS AND CAPITAL EXPENDITURES

Consolidated operating costs at the mine before write-offs increased from \$12,184,000 or \$28.46 per ton in 1976 to \$12,908,000 or \$28.94 per ton in 1977. This was largely attributable to a 32% increase in power rates effective April 1, 1977, which added \$220,000 to expenditures despite the fact that energy savings of 4.6% were achieved.

Capital expenditures decreased from \$1,254,000 to \$578,000. The major item for 1977 was a new diesel generating plant that will run all essential equipment in the mill including the roaster but not crushers and grinding units, in the event of a power outage. Other major expenditures were for environmental control purposes and the open pits.

## SUMMARY OF 1977 RESULTS BY QUARTERS

The following is a consolidated statement of earnings for each quarter of 1977.

OPERATING RECORD	Three Months Ended				Total
	March 31	June 30	Sept. 30	Dec. 31	
Ore milled, tons	112,426	108,071	112,075	113,620	446,192
Average per day, tons	1,249	1,188	1,218	1,217	1,222
Average millheads per ton	0.274	0.261	0.272	0.276	0.271
Gold recovered, ounces	27,283	24,623	27,065	27,172	106,143
Silver recovered, ounces	5,214	6,383	4,473	6,739	22,809
<b>STATEMENT OF EARNINGS (000 omitted)</b>					
Revenue from metal production (less marketing charges)	\$ 4,060	\$ 3,805	\$ 4,405	\$ 5,029	\$ 17,299
Operating and administrative expenses	3,008	3,210	3,137	3,553	12,908
	1,052	595	1,268	1,476	4,391
Depreciation and amortization	175	171	176	366	888
Exploration expenses	45	66	149	81	341
	220	237	325	447	1,229
	832	358	943	1,030	3,162
Non-operating revenue	91	122	153	102	468
	923	480	1,096	1,132	3,631
Income taxes	196	80	262	300	838
	727	400	834	832	2,792
Minority interest in earnings of subsidiary companies	43	78	131	89	341
Earnings (loss) for the period	\$ 684	\$ 322	\$ 703	\$ 743	\$ 2,451
Earnings (loss) per share	\$ .159	\$ .075	\$ .163	\$ .173	\$ .57
Average price per ounce of gold produced	\$ 149.46	\$ 149.65	\$ 165.80	\$ 185.56	\$ 163.63

Note: Metal production at December 31, 1977, includes 17,028 ounces of gold valued at \$174.00 per ounce which has not been sold.

## **MINING OPERATIONS**

### **Giant Mine**

Output at the Giant Mine was 393,000 tons grading 0.254 oz. gold per ton compared with the 394,000 tons at 0.267 oz. per ton in 1976. The open pit contributed 47% of the Giant total, and was in part the reason for the lower average grade in 1977. Although bullion output of 87,755 oz. was considerably reduced, operating profit of \$3,363,000 showed a substantial gain over last year's \$617,000 due to the higher price for gold and continuation of cost control measures instituted in 1976.

Operating costs in 1977 were \$28.51 per ton, up only slightly from the previous year's \$28.07 per ton. Changes in mining methods from "cut and fill" to "shrinkage" and "long hole" methods resulted in an underground cost saving of \$1.67 per ton.

Lateral advance totalled 6,643 feet and raising 1,673 feet, both about 20% less than planned but 31% more than in 1976. Diamond drilling totalled 83,000 feet, down 5% from the previous year's total.

### **Lolor Mine**

Production at Lolor continued to be hampered by a shortage of miners and lack of working places. Output was 7,600 tons, up somewhat from the 6,000 tons produced in 1976. Grade at 0.315 oz. gold per ton was also somewhat improved over the .258 obtained last year.

Operating costs were \$39.90 per ton but, with higher price, operating profit before write-offs was \$49,000 compared with the loss of \$42,000 in 1976.

Only 26 feet of lateral advance and 158 feet of raising were completed. A total of 1,558 feet of underground exploration drilling was done with negative results.

### **Supercrest Mine**

Production was 45,000 tons at a grade of 0.409 oz. gold per ton compared with the 28,000 tons at 0.476 oz. gold per ton obtained in 1976.

Operating costs, at \$38.04 per ton, were down from the \$42.93 of the previous year and, with improved bullion output, the operating profit of \$978,000 was well ahead of the \$233,000 obtained in 1976.

Lateral advance was 192 feet and raising 475 feet. Diamond drilling, totalling 4,276 feet, was done from surface in an area about 5,200 feet north of present workings where ore grades over narrow widths were encountered in old drill holes. Two holes, drilled before year-end, intersected a narrow schist zone that carried only minor gold values. A third hole was being drilled at year-end and was completed soon after. It failed to encounter favourable schist. Follow-up drilling is continuing in 1978.

### **Treatment Plant**

Overall gold recovery of 87.73% was down from the 88.21% of last year, partially as a result of treating a greater tonnage at lower grade, but also because of poorer cyanide extractions.



Although overall recovery was down, there were improvements in flotation and carbon treatment plant recoveries.

### **Environmental Control**

Efforts were continued to improve environmental control procedures. A change in operating technique has significantly improved bag-house efficiency.

Improvements were also made in the tailings impoundment area by depositing unclassified tailings on the upstream side of one of the major dams. This significantly reduced seepages.

A pilot plant study, jointly carried out by Environment Canada and Giant Yellowknife to investigate techniques for improving quality of effluent streams, was completed. Results of the study are presently being assessed to determine whether the technology developed is economically practical.

Early in the year, in response to unfavourable publicity concerning possible hazards caused by the treatment of ores at the mines in Yellowknife, the Government of Canada asked the Canadian Public Health Association to appoint a Task Force to study environmental problems in the Yellowknife area. Results of the study were released in January 1978. The Task Force found that there were no immediate health effects to the general population, and most of the recommendations were directed to reducing potential exposures to arsenic in the work place.

The Corporation is continuing to afford full co-operation to governmental authorities to achieve further improvements in environmental control. Recommendations made by the Task Force concerning safe practices are being implemented.

## **EXPLORATION ACTIVITIES**

Exploration expenditures in the mine area and on outside properties totalled \$340,000 as compared with the \$522,000 spent in 1976. Most of the work was done in the area north of the mine in the search for gold.

### **Mine Area**

An option was acquired on nine claims known as the Lynx Group, north of the Supercrest property. Two drill programs, totalling 8,106 feet, were completed to test two previously known shear zones. Narrow, low-grade intersections were obtained that indicate a small open pit potential on the property, but follow-up drilling is required.

On the adjacent Northbelt claims, compilation work was done followed by an airborne input magnetometer survey and additional surface mapping. A geophysical response was obtained on one portion of the claims where extensive shearing has been noted. Twenty claims were staked to protect ground flanking this zone. Follow-up ground geophysics confirmed the anomalies and it is planned to do additional work including drilling in 1978.

Ten miles south of Yellowknife, an option was taken on 72 claims where a possible extension of gold bearing shear zones may exist. Following geological and geophysical

work of previous years, three holes were drilled early in 1977 for a total of 1,910 feet. No shear zones were encountered. A limited drill program has been planned for early 1978 to further test the property.

### **Outside Exploration**

Expenditures on outside exploration were \$136,000 as compared with the \$208,000 in 1976. Work was done on six projects, of which three were wound up. Work accomplished was as follows:

#### Clermont and Chazel

A detailed geophysical survey was conducted in Clermont Township, Quebec, and showed anomalous ground extending 600 feet west of previous drilling. Other parallel anomalies were also detected so that further work will be required.

On the nearby Chazel property, where anomalies had been detected in previous work, a total of 1,096 feet was drilled in three holes without success.

#### Arcadia

Follow-up geophysical surveys were done at the Coronation Gulf property in the Northwest Territories to determine whether there were any extensions to the weakly mineralized zone encountered in diamond drilling in 1976. The results were negative and the property returned to the owners.

#### Other Exploration

Geophysical surveys were conducted on the Vangorda property located in a favourable mineral belt of the Yukon. Several anomalies were detected that will require follow-up work.

A geological-geochemical survey was conducted on the 66 claims of the Yumack Syndicate in the MacMillan Pass area of the Yukon. Additional geochemical work and a geophysical survey will be conducted in the southwest corner of the property during 1978.

In the MacKenzie Mountain area of the Northwest Territories, a "grassroots" program of prospecting and geological work was carried out in an area under active exploration for base metal sulphides. No economic sulphides were encountered and no further work is anticipated.

## **SUDBURY BASIN DIVISION**

Work by a predecessor company between 1952 and 1956 indicated large reserves of low grade base metal sulphides containing copper, lead and zinc with some gold and silver, but of a character not mineable because of serious metallurgical problems. Although the Corporation has conducted several research programs, there appears to be no ready solution to these problems.

At present the shafts are flooded so that fresh samples for metallurgical investigation would require expensive dewatering or, as an alternative, large diameter diamond drilling. Because the deposits at Sudbury cannot be mined and treated properly at the present time, they cannot be classified as ore.

## GENERAL

The improvement in labour turnover which began in 1976, continued through 1977. The turnover for the Mine Department was 198% compared with 235% in 1976, and for the whole plant was 124% vs. 157%. The number of employees at year end was 320 compared with 310 in 1976.

## ACKNOWLEDGEMENTS

The Directors gratefully acknowledge the contribution of the employees under the able management of Mr. W. A. Moore. Notice is made of the record tonnage achieved this year together with the success in holding costs in check.

Mr. J. R. Smith retired as President and Managing Director of the Corporation on September 1, 1977. The Directors wish to record their appreciation for the services rendered by Mr. Smith during his many years with the Corporation. Mr. Smith worked at the Giant mine as General Superintendent from 1957 to 1962, and was President and Managing Director of the Corporation for the past two years.

On behalf of the Board,

D. J. EMERY,

President and Managing Director.

Toronto, Ontario,  
February 20, 1978.

The shares of the Corporation are listed and traded on the Toronto and American Stock Exchanges, the latter being the principal market. The sale prices and dividends paid for the following quarterly periods are as tabulated below.

		1977					1976		
		High	Low	Dividends Paid per Share in Canadian Funds			High	Low	Dividends Paid per Share in Canadian Funds
March	31	U.S.\$8¾	U.S.\$6¼	— cents	March	31	U.S.\$8¾	U.S.\$6¾	10 cents
June	30	7¾	5½	— cents	June	30	7¾	5%	— cents
September	30	8½	5¾	— cents	September	30	6	3%	— cents
December	31	9½	7½	15 cents	December	31	8%	4%	— cents



YELLOWKNIFE MINES LIMITED

(Incorporated under the laws of Ontario)  
and its subsidiary companies

## CONSOLIDATED BALANCE SHEET

### ASSETS

	1977	1976
<b>CURRENT ASSETS</b>		
Cash and short term securities, at cost which approximates market value	\$ 5,976,770	\$ 3,891,519
Bullion (note 2)	3,336,870	2,311,019
Accounts and accrued interest receivable	180,545	141,425
Supplies	1,324,960	1,476,698
Prepaid expenses and deposits	63,087	45,850
	<u>10,882,232</u>	<u>7,866,511</u>
<b>FIXED ASSETS</b>		
Buildings, machinery and equipment, at cost	17,904,580	17,384,935
Less accumulated depreciation	16,492,477	15,945,322
	1,412,103	1,439,613
Mining claims and properties, at cost less depletion	542,137	542,137
	<u>1,954,240</u>	<u>1,981,750</u>
<b>OTHER ASSETS</b>		
Shares in and advances to other mining companies, at cost less amount written off	146,333	167,221
Deferred charges, less amortization	265,683	548,283
	412,016	715,504
	<u>\$13,248,488</u>	<u>\$10,563,765</u>

### AUDITORS' REPORT

To the Shareholders of  
GIANT YELLOWKNIFE MINES LIMITED

We have examined the consolidated balance sheet of Giant Yellowknife Mines Limited as at December 31, 1977 and the consolidated statements of income, retained earnings and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

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

Toronto, Canada  
January 27, 1978

THORNE RIDDELL & CO.,  
Chartered Accountants

# AS AT DECEMBER 31, 1977

## LIABILITIES

CURRENT LIABILITIES	1977	1976
Accounts payable and accrued liabilities .....	\$ 1,150,096	\$ 1,192,424
Income taxes payable .....	778,345	136,612
Government royalties payable .....	115,466	10,544
	<u>2,043,907</u>	<u>1,339,580</u>
 MINORITY INTEREST		
Interest of minority shareholders in subsidiary companies .....	538,179	363,554
	<u>538,179</u>	<u>363,554</u>
 <b>SHAREHOLDERS' EQUITY</b>		
<b>CAPITAL STOCK</b>		
Authorized — 4,500,000 shares without par value		
Issued — 4,303,050 shares .....	5,700,000	5,700,000
CONTRIBUTED SURPLUS .....	2,637,276	2,637,276
RETAINED EARNINGS .....	2,329,126	523,355
	<u>10,666,402</u>	<u>8,860,631</u>
Approved by the Board		
D. J. EMERY, Director		
J. D. STREIT, Director		
	<u>\$13,248,488</u>	<u>\$10,563,765</u>

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

YEAR ENDED DECEMBER 31, 1977

1. ACCOUNTING POLICIES
  - (a) Consolidation Policy  
The consolidated financial statements include the accounts of Lolor Mines Limited, in which 87½% of the common shares are held, and Supercrest Mines Limited, in which 50% (332,506 common shares) of the 665,010 common shares are held.
  - (b) Inventories — Bullion and Supplies  
Bullion is valued at estimated net realizable value and revenue is reflected in the statement of income on completion of production. Supplies are valued at average cost.
  - (c) Depreciation and Amortization  
Depreciation of buildings, machinery and equipment acquired subsequent to January 1, 1973 is provided on the units of production method to amortize the cost over the mine life based on estimated ore reserves. All plant acquired prior to that date had been fully depreciated by December 31, 1973.  
Depletion provided to December 31, 1973 has fully amortized the cost of the Yellowknife mining claims. The unamortized balance relates to the non-producing Sudbury Basin property and land in the Town of Yellowknife.  
Deferred charges are being amortized over the estimated life of the mine.
  - (d) Exploration Expenditures  
Exploration expenditures are charged against current earnings as incurred.
2. BULLION  
The estimated net realizable value of bullion on hand has been determined at December 31, 1977 using a value for gold of Cdn. \$174.00 per ounce (1976, Cdn. \$131.00 per ounce).
3. RETIREMENT PLANS  
The company maintains retirement plans for its employees. The total expense of these plans was \$372,947 for 1977 and \$230,147 for 1976, including past service costs of \$196,593 for 1977 and \$99,042 for 1976. Based on the most recent actuarial evaluations, the present value of past service costs not yet funded was approximately \$565,000 at December 31, 1977 and \$751,000 at December 31, 1976 (assuming employees remain with the company until retirement).  
While the company has no legal liability for the past service costs, it is its present intention to fund and charge the costs to income over periods of up to 12 years.
4. REMUNERATION OF DIRECTORS AND SENIOR OFFICERS  
Direct remuneration of directors and senior officers, as defined by The Business Corporations Act of Ontario, amounted to \$208,864 for 1977 and \$190,845 for 1976.
5. ANTI-INFLATION ACT  
The company is subject to the Anti-Inflation Act which provides, as from October 14, 1975, for the restraint of profit margins, prices, dividends and compensation. It is management's opinion that the company has complied with the rules, regulations and practices of the Anti-Inflation Board for the period ended December 31, 1977. Under these regulations the maximum dividend per share that could be paid or declared in the twelve months ending October 13, 1978 is 5¢.



YELLOWKNIFE MINES LIMITED

(Incorporated under the laws of Ontario)  
and its subsidiary companies

## CONSOLIDATED STATEMENT OF RETAINED EARNINGS

Year ended December 31, 1977

	<u>1977</u>	<u>1976</u>
BALANCE AT BEGINNING OF YEAR .....	\$ 523,355	\$ 1,139,804
Net income (loss) .....	<u>2,451,229</u>	<u>(186,157)</u>
	2,974,584	953,647
Deduct dividends paid — 15¢ per share (10¢ in 1976) .....	<u>645,458</u>	<u>430,292</u>
BALANCE AT END OF YEAR .....	<u>\$ 2,329,126</u>	<u>\$ 523,355</u>

## CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION

Year ended December 31, 1977

	<u>1977</u>	<u>1976</u>
WORKING CAPITAL DERIVED FROM		
Operations .....	<u>\$ 3,679,892</u>	<u>\$ 618,959</u>
WORKING CAPITAL APPLIED TO		
Dividends paid .....	645,458	430,292
Additions to fixed assets, less disposals .....	577,676	1,254,244
Dividends to minority shareholders of subsidiary companies .....	166,252	197,502
Deferred charges .....		6,603
Other .....	<u>(20,888)</u>	<u>5,960</u>
	1,368,498	1,894,601
INCREASE (DECREASE) IN WORKING CAPITAL .....	2,311,394	(1,275,642)
WORKING CAPITAL AT BEGINNING OF YEAR .....	<u>6,526,931</u>	<u>7,802,573</u>
WORKING CAPITAL AT END OF YEAR .....	<u>\$ 8,838,325</u>	<u>\$ 6,526,931</u>

## CONSOLIDATED STATEMENT OF INCOME

Year ended December 31, 1977

	<u>1977</u>	<u>1976</u>
<b>REVENUE</b>		
Gold and silver production .....	\$17,496,055	\$13,137,735
Deduct marketing expenses .....	<u>197,398</u>	<u>146,660</u>
	<u>17,298,657</u>	<u>12,991,075</u>
 <b>EXPENSES</b>		
Operating expenses .....	12,434,725	11,875,261
Government of Canada royalty .....	113,704	19,000
Administrative and corporate expenses .....	<u>359,544</u>	<u>289,325</u>
	<u>12,907,973</u>	<u>12,183,586</u>
Operating income before the undernoted items .....	<u>4,390,684</u>	<u>807,489</u>
Depreciation .....	605,186	410,193
Amortization of deferred charges .....	282,600	301,175
Exploration expenses .....	<u>340,431</u>	<u>521,604</u>
	<u>1,228,217</u>	<u>1,232,972</u>
Operating income (loss) .....	3,162,467	(425,483)
Income from investments .....	<u>468,025</u>	<u>432,353</u>
	3,630,492	6,870
Income taxes .....	<u>838,386</u>	<u>99,279</u>
	2,792,106	(92,409)
Minority interest in net income of subsidiary companies .....	<u>340,877</u>	<u>93,748</u>
<b>NET INCOME (LOSS)</b> .....	<u><u>\$ 2,451,229</u></u>	<u><u>\$ (186,157)</u></u>
 <b>EARNINGS (LOSS) PER SHARE</b> .....	 \$ .57	 \$(.04)

## COMPARATIVE STATEMENT OF

Fiscal Year Ended May 31	Ore Milled Tons	Calculated Mill Heads Oz. gold Per Ton	Estimated E.G.M.A. Assistance	Net Value of Metals Recovered	Average Price Per Ounce of Gold	Operating Cost Before Write-offs	Operating Cost Per Ton
1949	84,886	0.815	\$ 511,020	\$ 1,962,340	\$ 35.00	\$ 1,467,133	\$ 17.28
1950	126,214	0.708	354,326	2,986,457	37.46	1,826,453	14.47
1951	151,814	0.842	267,874	4,158,038	37.35	1,997,073	13.15
June 30							
1952	165,846	0.755	615,000	3,854,137	35.79	2,658,570	16.03
1953	245,559	0.846	680,000	6,012,389	34.20	3,561,546	14.51
1954	275,985	0.785	965,000	6,045,327	34.26	3,704,451	13.42
1955	286,742	0.761	700,000	5,876,857	34.16	3,912,978	13.65
1956	297,582	0.765	120,000	6,235,926	34.76	4,284,385	14.40
1957	309,673	0.795	105,000	6,396,699	33.75	4,234,517	13.67
1958	289,220	0.795	340,000	5,331,448	33.85	3,872,120	13.39
1959	321,002	0.784	280,000	6,397,770	33.81	4,048,047	12.61
June 29							
1960	361,601	0.784	13,687	7,649,230	33.50	4,338,972	12.00
Dec. 31							
1960	181,101	0.795	.....	4,080,679	34.63	2,529,960	13.96
1961	366,515	0.779	.....	8,507,473	35.73	4,755,387	12.97
1962	375,820	0.763	.....	9,445,300	37.56	4,743,728	12.62
1963	388,190	0.713	.....	9,254,173	37.76	4,758,936	12.26
1964	400,606	0.745	.....	10,120,070	37.62	4,789,045	11.95
1965	395,001	0.722	.....	9,565,401	37.68	5,087,109	12.88
1966	384,271	0.652	.....	8,517,823	37.99	5,191,314	13.51
Consolidated							
1967	319,876	0.670	.....	7,204,874	37.99	4,990,864	15.60
1968	374,717	0.634	265,000	8,739,180	41.60	6,005,179	16.03
1969	399,647	0.640	427,000	9,824,021	42.78	7,289,123	18.24
1970	424,774	0.607	1,059,000	8,328,261	36.47	7,483,992	17.62
1971	403,819	0.621	783,000	8,350,188	38.47	7,609,781	18.84
1972	401,272	0.561	.....	11,990,328	59.87	8,506,758	21.20
1973	389,460	0.459	.....	17,054,358	108.03	9,298,649	23.88
1974	328,099	0.355	.....	16,382,316	161.73	11,120,874	33.90
1975	391,969	0.286	.....	15,377,970	156.68	13,059,200	33.32
1976	428,154	0.281	.....	12,991,075	122.08	12,183,586	28.46
1977	446,192	0.271	.....	17,298,657	163.63	12,907,973	28.93
	<u>9,715,607</u>	<u>0.639</u>	<u>\$7,485,907</u>	<u>\$255,938,765</u>	<u>\$ 48.59</u>	<u>\$172,217,703</u>	<u>\$ 17.73</u>



## PRODUCTION AND EARNINGS

Operating Profit Before Write-offs	Operating Profit Per Ton	Write-offs and Outside Exploration	Non-Operating Income	Income Tax	Minority Interest	Net Profit	Dividends Declared
\$ 1,006,227	\$ 11.85	\$ 859,567	\$ 6,790	\$ .....	\$ .....	\$ 153,450	\$ .....
1,514,330	12.00	1,039,854	5,237	.....	.....	479,713	.....
2,428,839	16.00	1,254,505	6,334	.....	.....	1,180,668	.....
1,810,567	10.92	1,659,109	7,981	.....	.....	159,439	.....
3,130,843	12.75	1,673,329	4,906	.....	.....	1,462,420	800,000
3,305,876	11.98	1,854,444	22,793	12,000	.....	1,462,225	1,600,000
2,663,879	9.29	1,738,576	14,728	4,000	.....	936,031	1,400,000
2,071,541	6.96	1,354,636	71,219	.....	.....	788,124	1,200,000
2,267,182	7.32	1,355,458	51,901	4,000	.....	959,625	600,000
1,799,328	6.22	1,118,946	59,919	4,000	.....	736,301	1,200,000
2,629,723	8.19	1,096,477	51,060	85,000	.....	1,499,306	1,200,000
3,323,945	9.19	1,243,404	103,858	490,000	.....	1,694,399	1,800,000
1,550,719	8.56	829,368	86,158	.....	.....	807,509	860,541
3,752,086	10.24	1,579,897	160,058	.....	.....	2,332,247	1,936,290
4,701,572	12.51	1,029,749	245,321	(30,477)	.....	3,947,621	3,012,027
4,495,237	11.58	879,752	308,635	.....	.....	3,924,120	4,302,903
5,331,025	13.31	855,679	332,850	.....	.....	4,808,196	4,302,910
4,478,292	11.34	802,319	449,827	580,000	.....	3,545,800	4,302,917
3,326,509	8.65	979,060	308,537	620,000	.....	2,035,986	2,581,752
2,214,010	6.92	948,305	363,849	300,000	(38,458)	1,368,012	1,721,167
2,999,001	8.00	721,400	358,715	720,000	12,267	1,904,049	1,721,168
2,961,898	7.41	837,589	355,624	645,300	(65,372)	1,900,005	1,721,168
1,903,269	4.48	728,703	396,451	266,700	(30,951)	1,335,268	1,721,168
1,523,407	3.77	965,039	302,475	53,000	45,930	761,913	1,721,168
3,483,570	8.68	1,148,922	257,777	621,000	502,039	1,469,386	1,721,168
7,755,709	19.91	986,013	642,789	2,412,000	729,017	4,271,468	2,581,753
5,261,442	16.04	808,239	847,235	1,635,000	786,679	2,878,759	2,151,461
2,318,770	5.92	2,049,556	689,737	394,000	259,594	305,357	1,721,168
807,489	1.89	1,232,972	432,353	99,279	93,748	(186,157)	430,292
4,390,684	9.84	1,228,217	468,025	838,386	340,877	2,451,229	645,458
<u>\$91,206,969</u>	<u>\$ 9.39</u>	<u>\$34,859,084</u>	<u>\$7,413,142</u>	<u>\$9,753,188</u>	<u>\$2,635,370</u>	<u>\$51,372,469</u>	<u>\$48,956,479</u>



GIANT YELLOWKNIFE MINES LIMITED  
LOCATION OF YELLOWKNIFE MINE

SCALE 0 100 200 300 400 MILES

### MINE OPERATING OFFICIALS

As of January 1, 1978

W. A. MOORE	-	-	-	-	-	General Manager
G. A. AALTONEN	-	-	-	-	-	Mine Superintendent
K. S. MORTON	-	-	-	-	-	Mill Superintendent
R. W. SPENCE	-	-	-	-	-	Exploration Superintendent
H. B. BYE	-	-	-	-	-	Master Mechanic
B. BERGERSEN	-	-	-	-	-	Chief Electrician
J. A. CROSSFIELD	-	-	-	-	-	Construction Foreman
Z. J. KOWAL	-	-	-	-	-	Chief Engineer
W. MEYER	-	-	-	-	-	Chief Geologist
A. A. INCH	-	-	-	-	-	Mine Geologist
W. J. WALSH	-	-	-	-	-	Chief Accountant
J. W. McKAY	-	-	-	-	-	Purchasing Agent
R. D. KAPICKI	-	-	-	-	-	Personnel Supervisor
G. C. PUECH	-	-	-	-	-	Chief Safety Officer

