

C
Stack

Seventh
Annual Report . . .

FROBISHER LIMITED



FOR YEAR ENDED
OCTOBER 31st, 1950

PURVIS HALL
LIBRARIES

JAN 31 55

McGILL UNIVERSITY

FROBISHER LIMITED

HEAD OFFICE

25 King Street West, Toronto, Canada

OFFICERS

Thayer Lindsley - - - - - President
A. J. Anderson - - - - - Vice-President
J. M. Cunningham-Dunlop - - - - - Vice-President
A. G. Fulton - - - - - Secretary
W. B. Malone - - - - - Treasurer
G. T. N. Woodrooffe - - - - - Assistant Secretary
& Assistant Treasurer

DIRECTORS

A. J. Anderson J. M. Cunningham-Dunlop
A. G. Fulton T. Lindsley W. B. Malone M. A. Thomson

TECHNICAL CONSULTANTS

Mining Engineers

A. J. Anderson
J. M. Cunningham-Dunlop
B. G. Edward
E. V. Neelands

Geologists

A. S. Dadson
D. R. Derry
E. L. Evans
D. C. Sharpstone
Alex Smith

Metallurgists

F. R. Archibald, C. W. Dowsett

TRANSFER AGENTS AND REGISTRARS

National Trust Company Limited
20 King Street East, Toronto, Ont.
and
225 St. James St., Montreal, Que.

Registrar and Transfer Company
2 Rector St., New York 6, N.Y.
and
15 Exchange Place, Jersey City 2, N.J.

AUDITORS

Clarkson, Gordon & Co.
Toronto, Ontario

Annual Meeting of Shareholders

Wednesday, April 4, 1951, at 11 a.m., Room 2710, The Canadian
Bank of Commerce Building, 25 King Street West, Toronto

FROBISHER LIMITED

Report of the Directors

To the Shareholders:

Your Directors submit herewith a balance sheet of Frobisher Limited and statements of income and surplus for the year ended October 31, 1950, as certified by your auditors, Messrs. Clarkson, Gordon & Co.

FINANCIAL

In December, 1949, 40,000 shares of your company's capital stock were sold to Nesbitt, Thomson & Company, Limited and Ventures Limited at \$2.75 per share and an option given on 160,000 shares at \$3.00 per share good until June 9, 1951. Since October 31, 1950, Nesbitt, Thomson & Company, Limited and Ventures Limited have exercised these options in full and have paid into the Frobisher treasury the sum of \$480,000.

The following tabulation gives the consolidated holdings of your company in various operations as of February 1, 1951.

	Shares Held Feb. 1, 1951	Percentage Interest at Feb. 1, 1951
Akaitcho Yellowknife Gold Mines Limited	1,235,230	37.83%
Kilembe Copper Limited (Uganda)	1,205,056	63.03%
Connemara Mines (Southern Rhodesia)	*	100.00%
Giant Yellowknife Gold Mines Limited	1,164,936	29.12%
Guayana Mines Limited	1,428,687	28.57%
Mediterranean Mines Incorporated	1,728,185	49.38%
New Calumet Mines Limited	1,006,639	28.76%
St. Eugene Mining Corporation Limited	839,184	34.76%
United Keno Hill Mines Limited	833,539	33.75%

* Not incorporated—operated as a division of the company.

GENERAL

Results at all the operations in which your company is interested have been satisfactory during the past year. Beginning in 1952 it is expected that your company will receive a substantial income from at least four operating companies.

Reports on the Kilembe copper-cobalt enterprise in Africa are now being finalized and when these are completed, your Directors will proceed to arrange for the necessary financing to put this important property into production.

Your Directors once more wish to express their appreciation of the good work rendered by the staffs and employees of your associated companies.

On behalf of the Board,

T. LINDSLEY,
President.

Toronto, Ontario,
March 5, 1951.

FROBISHER LIMITED

To the President and Directors,
Frobisher, Limited,
Toronto, Ontario.

Gentlemen:

Progress during the fiscal year ended October 31, 1950, at the principal mines in which Frobisher holds a substantial interest, is briefly reviewed in the following summaries. The report on operations for the period at the wholly-owned Connemara Mine, by the General Manager for Africa, is appended (Pages 14 and 15).

BASE METALS

NEW CALUMET MINES LIMITED

Mine at Calumet Island, Quebec—Canada

Production

	Tons Milled	Metals Produced in Concentrate Form			
		Zinc Lbs.	Lead Lbs.	Silver Ozs.	Gold Ozs.
Total to September 30, 1949.....	1,127,921	148,152,305	42,348,263	3,172,880	13,881
For year ended September 30, 1950.....	254,977	28,334,789	8,360,605	729,946	4,446
	1,382,898	176,487,094	50,708,868	3,902,826	18,327

Current Milling Rate 700 tons per day.

Net profit for the fiscal year ended September 30, 1950, amounted to \$851,196.06, or 24.3 cents per share. Dividends totalling \$559,985.12, or 16 cents per share, were paid during this period. Tonnage treated was approximately 20% higher than during the previous year, as a result of additions to the mill.

As of September 30, ore reserves were estimated at 815,886 tons averaging 7.7% zinc, 2.4% lead, 4.78 ounces per ton silver, and 0.031 ounces per ton of gold. New ore has been encountered on the 1350 level, the deepest level under development, and its extensions are now being explored by diamond drilling. Results to date have been encouraging, and will add materially to the reserves reported above.

UNITED KENO HILL MINES LIMITED

Mines in Mayo District, Yukon Territory—Canada

Production

	Tons Milled	Metals Produced in Concentrate and Crude Ore Form		
		Silver Ozs.	Lead Lbs.	Zinc Lbs.
To October 31, 1949	80,652	6,818,261	24,258,411	8,168,952
November 1, 1949, to October 31, 1950	71,216	3,100,652	13,186,265	6,667,150
	151,868	9,918,913	37,444,676	14,836,102

Current Milling Rate — 220 tons per day.

The new mill, of 250 tons per day capacity, replacing the old Elsa plant which was destroyed by fire, came into production at the end of October, 1949. Starting at approximately 100 tons, the daily tonnage has been gradually raised to the current rate, and will shortly reach capacity. Plans have been made to expand to some 325 tons per day with addition of further equipment.

Though underground work suffered during the period of mill construction, ore development has since been very satisfactory. At the end of December, 1949, reserves of broken, developed, and probable ore were estimated at 203,177 tons averaging 45.6 ounces of silver per ton and 7.9% lead, of which 81% were in the Hector Mine. Reserves were greatly increased during 1950.

KILEMBE CONCESSION

Uganda—Africa

During the year ended October 31, 1950, development work on the copper-cobalt deposits comprised 5,970 feet of lineal underground advance, 5,750 feet of underground diamond drilling, and 6,950 feet of drilling from surface. Underground development was principally on the Northern and Eastern Deposits, while surface drilling was confined to the Eastern and Stream Deposits. Estimates of ore, partially outlined or strongly indicated by underground workings and diamond drilling, totalled some 7 million tons at the year end. The metal content cannot be fully assessed until more detailed work is completed, but grade now indicated is slightly over 2% copper and approximately 0.2% cobalt. This does not include large additional tonnages of "possible" ore which may be postulated by reasonable projections below present developed exposures, and from isolated drill hole intersections. It now appears probable that all of the deposits under development occur within, and are following, the same general stratigraphic horizon in a sedimentary series, and combined geological and geophysical evidence show that very considerable extensions of the zone may be expected beyond the limits of present development and exploration.

Because of the favourable ore developments, and the possibilities for exploration in the favourable horizon, application has been made for an extension of the area, now granted under the Special Exclusive Prospecting License, by some 26 square miles. In order to expedite exploration two additional surface drills are to be placed in operation early in 1951.

A small pilot mill with a capacity of 5 tons per 8-hour shift was erected and put into operation at the end of the year. This will be used for metallurgical tests in connection with the beneficiation of copper and cobalt, and for bulk sampling. Extensive metallurgical test work is being carried out by the Battelle Memorial Institute, Columbus, Ohio, to establish the most suitable method by which the metals may be recovered.

Early in 1950, Rio Tinto Company Limited, of London, England, accepted an invitation to participate in the financing of Kilembe. A new company has been formed to develop the property and is being financed jointly by Rio Tinto and Frobisher.

MEDITERRANEAN MINES INCORPORATED

Mines in the Laurium District, Greece—Europe

Installation of equipment for the 200-ton concentration plant for treating silver-lead-zinc ore was delayed pending a final decision from the Economic Co-operative Administration. Now that an advance of \$102,193 of E.C.A. funds and a further 10 billion drachmas (\$666,000) from E.C.A.-Greek Government Counterpart funds have been authorized, the construction and installation of machinery are being completed.

Ore will be obtained at first from the Sounium and from the Avlaki-Vromopoussi areas, in both cases from the upper of the two main ore horizons, and also from some ore dumps. It is intended to carry out exploration on extensions of the upper horizon and also to investigate the lower horizon which is almost untouched on the Mediterranean Mines property but which has supplied a considerable part of the production on the adjoining French Laurium operation.

G O L D

CONNEMARA MINE (Wholly-owned)

Southern Rhodesia—Africa

Production

	Tons Milled	Ounces Gold Recovered	Gross Value of Production
Total to October 31, 1949	184,599	34,522	£344,862—13— 9
For year ended October 31, 1950	115,950	23,032	287,168— 6—10
	<hr/> 300,549	<hr/> 57,554	<hr/> £632,031— 0— 7

Current Milling Rate 400 tons per day.

Reserves of ore — broken, blocked out, and partially blocked out — at October 31, 1950 were estimated at 524,200 tons averaging 0.24 ounces per ton. In addition, there were 208,000 tons of possible ore estimated from drill intersections. There are also a further 208,000 tons with an indicated gold content of 0.13 ounces per ton, which under present conditions is below ore grade.

Cash income from operations during the year was sufficient to meet all capital expenditures. The latter included mill expansion, completion of the Zabonkwe North Shaft to its initial depth of 768 feet, and starting of the new Lindsley Shaft in the south area. These two openings are designed for development and exploration of the ore zones to depth, below the dolerite sill.

GIANT YELLOWKNIFE GOLD MINES LIMITED

Mine at Yellowknife, Northwest Territories—Canada

Production

	Tons Milled	Gross Value of Metals Produced
For Fiscal Year Ended May 31, 1949	84,886	\$ 2,473,360.26
For Fiscal Year Ended May 31, 1950	126,214	3,018,596.93
For 5 month period ended October 31, 1950	64,595	1,787,527.60
Total	275,695	\$ 7,279,484.79

Current Milling Rate 425 tons per day.

As at May 31, 1950, reserves of developed ore at No. 2 (B) Shaft, above the 575 foot level, were placed at 712,000 tons averaging 0.69 ounces per ton. The new 409 orebody and the "lower" orebody were estimated to contain 580,000 tons averaging 0.63 above the 750 foot horizon, as outlined by diamond drilling on and below the 575 level.

No. 3 (C) Shaft has been completed to its initial depth of 1,029 feet and lateral work has commenced. This opening is designed as the main production shaft and is the first stage in the long range program which, with connections to No. 1 (A) Shaft and No. 2 (B) Shaft, will open up a strike length of some 10,000 feet on the property. In the South ASD Zone, which is immediately adjacent to No. 3 Shaft, 690,000 tons averaging 0.28 ounces per ton, to a maximum depth of 550 feet, was estimated from the original surface drilling. In the Southern Area estimates showed some 1,000,000 tons averaging 0.38 ounces per ton above the 325 foot horizon.

Last summer preliminary diamond drilling from surface was carried out in the Northern part of the property. This disclosed three potential ore structures, and in one of these the presence of an orebody was established. Ore bearing conditions have now been indicated along the whole length of the property on the east side of the West Bay fault.

As of May 31, 1950, bank and other loans were fully paid off. A small amount of interim financing was required in the fall for equipment, building materials, and working supplies for a twelve-month period. It is anticipated that all future outlays can be carried by earnings, and that the company can now build up a substantial cash reserve.

AKAITCHO YELLOWKNIFE GOLD MINES LIMITED

Mine at Yellowknife, Northwest Territories—Canada

At the Akaitcho property, which adjoins Giant Yellowknife on the north, all surface facilities for the commencement of underground operations were completed during the summer and early fall. This work comprised erection of the steel headframe, installation of the compressor and hoist, construction of the transmission line, completion of plant and camp buildings, and procurement of working supplies.

In conjunction with the above, a limited program of diamond drilling from surface was carried out, to obtain data to assist in determining the most economic layout for underground development. Needed information about the attitude of the ore was gained, and in addition, important intersections were obtained which have expanded previous conceptions of the ore potential of the zone.

GUAYANA MINES LIMITED

Mines in the El Callao District, Venezuela—South America

During the company's fiscal year ended August 31, 1950, 134,196 tons of ore were milled and 51,473 ounces of gold recovered. The tonnage includes old mill sands retreated. Since the start of milling operations in 1947, total production amounts to 138,790 ounces of gold from 272,974 tons of ore milled.

The continued effort and expenditures that were made to reduce cost per ton were not sufficiently effective to make the operation profitable. The attitude of labour and its high overall costs were problems that could not be overcome. The mines, therefore, were closed down at the end of August to prevent further loss on the operation.

GRAPHITE

BLACK DONALD GRAPHITE MINES (Wholly-owned)

Mine at Calabogie, Ontario—Canada

During the year ended October 31, 1950, production of raw graphite amounted to 3,785,800 lbs. from 9,597 tons of ore milled. Sales of finished product of various grades totalled 6,277,663 lbs. with a gross value of \$335,626.45. Net profit for the period was \$3,079.49.

In the Annual Report for 1947, it was recorded that the property had been sold to the Hydro-Electric Power Commission of Ontario. Since then mining has been on a salvage basis, and early in November, 1950, underground operations were terminated.

The company is actively investigating other graphite occurrences and has had considerable encouragement in regard to the possibilities for acquiring another source of supply.

A. J. ANDERSON,
Vice-President.

Toronto, Ontario,
February 9, 1951.

FROBISHER

(Incorporated under The

Consolidated Balance Sheet

ASSETS

Cash on hand and in banks		\$ 40,527.01	
Bullion in transit		36,238.53	
Accounts receivable—trade	\$ 45,507.05		
—sundry	24,280.16	69,787.21	
Inventory of graphite valued at 50% of selling price		31,413.35	\$ 177,966.10
Interest in subsidiary companies (Statement 4):			
Shareholdings at cost less amounts written off	\$ 880,600.97		
Advances	5,644.53	\$ 886,245.50	
Interest in affiliated and other companies (Statement 4):			
Shareholdings at cost less amounts written off	\$ 4,694,630.36		
Advances	1,107,892.99	5,802,523.35	
Shares to be purchased under agreements (contra)		267,497.00	6,956,265.85
Exploration expenditures carried forward			592,804.79
Mining properties at cost		\$ 374,076.47	
Buildings, plant and equipment, at cost	\$ 1,387,767.60		
Less reserve for depreciation	762,030.04	625,737.56	999,814.03
Deferred development expenses less amounts written off		\$ 106,570.93	
Supplies and spare parts at cost		181,854.48	
Sundry prepayments and deferred charges		15,310.97	303,736.38
			<u>\$ 9,030,587.15</u>

NOTES: (1) Current assets and liabilities in foreign currencies have been converted into Canadian dollars at the rate of exchange prevailing at the end of the period.
(2) There are options outstanding to sell 160,000 shares of the common stock of Frobisher Limited at a price of \$10.00 per share.

AUDITORS' REPORT

We have examined the consolidated balance sheet of Frobisher Limited and its wholly-owned subsidiary companies as at October 31, 1950, and the statements of consolidated profit and loss and of consolidated cash flows for the year ended on that date. In connection therewith we made a general review of the accounting methods and, without making a detailed audit, we are satisfied that the consolidated financial statements are true and correct.

We report that in our opinion the accompanying consolidated balance sheet and statements of consolidated profit and loss and of consolidated cash flows for the year ended on October 31, 1950, and of the results of their operations for the year, according to the best of our knowledge and belief, and the auditors have been complied with.

Toronto, Canada,
February 14, 1951.

R LIMITED

e Companies Act, Ontario)

et as at October 31, 1950

LIABILITIES

Bank indebtedness (secured)		\$	456,242.86	
Accounts payable			142,116.49	
Amounts owing to affiliated companies			80,381.37	
Provision for taxes on income			23,093.75	
Liability for shares to be purchased under agreements (contra)			267,497.00	\$ 969,331.47
Reserve for depletion on shares in affiliated companies				72,000.00
Capital (See Note 2):				
Authorized—5,000,000 shares of no par value				
Issued at October 31, 1949	4,438,956 shares	\$	8,906,256.99	
Issued for cash during the year ended October 31, 1950	40,000 shares		110,000.00	
Issued at October 31, 1950	<u>4,478,956</u> shares	\$	<u>9,016,256.99</u>	
Less:				
Deficit (Statement 2)		\$	515,513.75	
Special deficit (Statement 2)			511,487.56	1,027,001.31
				<u>7,989,255.68</u>

\$ 9,030,587.15

converted at the closing rates of exchange at October 31, 1950.
 company's capital stock at \$3.00 per share, exercisable prior to June 10, 1951.

O THE SHAREHOLDERS

es as at October 31, 1950 and the related statements of consolidated profit and loss, deficit and special deficit for the year
 a detailed audit of the transactions, examined or tested accounting records of the companies.

profit and loss, deficit and special deficit have been drawn up so as to exhibit a true and correct view of the state of the
 our information and the explanations given us and as shown by the books of the companies. All our requirements as

CLARKSON, GORDON & CO.,
 Chartered Accountants.

FROBISHER LIMITED

STATEMENT OF CONSOLIDATED DEFICIT FOR THE YEAR ENDED OCTOBER 31, 1950

Balance October 31, 1949		\$582,785.74
Deduct net profit for year (Statement 3)		67,271.99
		\$515,513.75
Balance October 31, 1950		\$515,513.75

STATEMENT OF CONSOLIDATED SPECIAL DEFICIT

(Consisting of the amounts written off exploration and research expenditures and investments in and advances to affiliated and other companies less the profit (net) on security transactions).

FOR THE YEAR ENDED OCTOBER 31, 1950

Balance October 31, 1949			\$527,316.16
Net gain on security transactions	\$58,814.13		
Profit on conversion of the net foreign currency assets of exploration subsidiaries	4,257.10	\$63,071.23	
		\$63,071.23	
Deduct:			
Exploration expenses written off	\$37,951.40		
Administration expenses of exploration subsidiaries	9,291.23	47,242.63	15,828.60
		47,242.63	15,828.60
Balance October 31, 1950			\$511,487.56

FROBISHER LIMITED

STATEMENT OF CONSOLIDATED PROFIT AND LOSS FOR THE YEAR ENDED OCTOBER 31, 1950

Head office:

Dividends received and interest earned	\$171,664.53		
Less portion thereof transferred to reserve for depletion	32,000.00		\$139,664.53
Deduct:			
Administrative and general expenses	\$ 59,478.93		
Interest on bank advances, etc.	10,193.36	69,672.29	\$ 69,992.24

Connemara Division (Southern Rhodesia):

Net proceeds from production	\$873,142.89		
Operating expenses	686,200.70		
		\$186,942.19	
Provision for depreciation and deferred development	171,844.50		
		\$ 15,097.69	
Deduct:			
Exploration expenses written off	\$ 3,863.50		
Loss on conversion of foreign currencies	6,906.94		
	\$ 10,770.44		

Less sundry income	8,966.76		1,803.68
--------------------------	----------	--	----------

Profit before provision for taxes	\$ 13,294.01		
Provision for Southern Rhodesian taxes on income	19,093.75		

Net loss of Connemara Division			5,799.74
--------------------------------------	--	--	----------

Black Donald Graphite Division:

Net sales	\$334,686.77		
Operating expenses	287,945.78		

	\$ 46,740.99		
--	--------------	--	--

Provision for depreciation	43,661.50		
----------------------------------	-----------	--	--

Net profit of Black Donald Graphite Division			3,079.49
--	--	--	----------

Net profit for year (excluding items in consolidated special deficit)			\$ 67,271.99
---	--	--	--------------

FROBISHER LIMITED

CONSOLIDATED STATEMENT OF INTEREST IN SUBSIDIARY, AFFILIATED AND OTHER COMPANIES AS AT OCTOBER 31, 1950

Company	Shareholdings		Indicated market values		Cost less amounts written off	Advances
	Number of shares or par value	Price per share	Amount	Amount		
Subsidiary companies:						
Kilembe Copper Limited	1,057,600				\$ 770,028.50	
Quebec Metallurgical Industries Ltd.	108,750				45,750.00	\$ 5,434.53
Miscellaneous participations of less than \$40,000 each					64,822.47	210.00
					<u>\$ 880,600.97</u>	<u>\$ 5,644.53</u>
Affiliated and other companies:						
Akaitcho Yellowknife Gold Mines Ltd.	1,237,230	\$ 1.39	\$ 1,719,749.70		\$ 452,242.59	
Dominion Magnesium Limited	8,334	12.00	100,008.00		66,672.00	
Dupresnoy Mines Limited	656,200				74,050.00	
Eureka Corporation Limited	102,625	.45	46,181.25		128,281.25	
Ferrum Limited						
—shares	26,265					
—5% debentures due 1957/1960	\$111,667.50				105,693.00	
Giant Yellowknife Gold Mines Ltd. ..	1,133,415	(See Note A)	7,365,731.62		645,241.36	
Guayana Mines Limited	603,981	.10	60,398.10		208,765.50	\$ 667,659.99
Horne Fault Mines Limited	881,634	.15	132,245.10		84,900.10	
Joliet-Quebec Mines Limited	1,036,400	1.08	1,119,744.00		135,601.77	
Lakefield Research Limited	204,963				81,985.20	
Mediterranean Mines Inc.	1,250,000				175,000.00	28,022.00
Michipicoten Iron Mines Limited	874,111				304,819.49	58,055.28
New Calumet Mines Limited	1,004,639	2.16	2,169,980.24		151,147.18	
Rainville Copper Mines Limited	729,089	.38	277,053.82		78,344.17	10,000.00
St. Eugene Mining Corporation Ltd.	839,184				319,388.24	295,929.37
United Keno Hill Mines Limited						
—shares	833,539	8.65	7,210,112.35		632,188.82	
—5% debentures due April 1, 1953	\$190,000.00				190,000.00	
Miscellaneous participations of less than \$60,000 each					632,768.63	860,309.69
					<u>\$ 20,833,972.81</u>	<u>\$ 4,694,630.36</u>
						<u>\$ 1,107,892.99</u>

NOTE A—

Shares of Giant Yellowknife Gold Mines Limited held in Canada priced at \$6.50 per share Canadian funds; shares held in United States priced at \$6.42 per share Canadian funds (\$6.13 U.S.).

CONNEMARA DIVISION OF
FROBISHER LIMITED

STATEMENT OF PROFIT AND LOSS FOR THE YEAR ENDED OCTOBER 31, 1950
(With comparative figures for the year ended October 31, 1949)

	1950		1949	
Tons ore milled	115,950 tons		105,504 tons	
Ounces gold produced	23,032 ounces		21,341 ounces	
		Shillings per ton ore milled		Shillings per ton ore milled
Bullion produced including subsidy of £24,587:13:0 in 1949 (See Note A)	£287,168: 6:10	49.533 shs.	£220,113: 0:10	41.726 shs.
Less realization charges	3,594:10:10	.620	2,595: 2: 8	.492
	£283,573:16: 0	48.913 shs.	£217,517:18: 2	41.234 shs.
Expenses:				
Development	£ 26,101: 6: 3	4.502 shs.	£ 24,321: 6: 3	4.611 shs.
Diamond Drilling	4,429:15: 9	.764	9,222: 3: 1	1.748
Mining	55,511: 6: 1	9.575	36,018:14: 9	6.828
Milling	91,636:17: 6	15.806	67,900:18:11	12.872
Shaft sinking	16,888: 9:10	2.913		
General	28,036:16:10	4.837	21,821: 4: 9	4.136
	£222,604:12: 3	38.397 shs.	£159,284: 7: 9	30.195 shs.
Operating profit before provision for depreciation and deferred develop- ment expenses	£ 60,969: 3: 9	10.516 shs.	£ 58,233:10: 5	11.039 shs.
Provision for depreciation	£ 37,275: 9: 7	6.430 shs.	£ 30,293: 1: 8	5.743 shs.
Provision for deferred development expenses	7,814:17:10	1.348	7,813:11: 3	1.481
	£ 45,090: 7: 5	7.778 shs.	£ 38,106:12:11	7.224 shs.
Operating profit for the year	£ 15,878:16: 4	2.738 shs.	£ 20,126:17: 6	3.815 shs.
Sundry income	2,909: 6: 2	.502	2,890:14: 3	.548
Expenditure on abandoned options and forfeited claims	1,248: 4: 2	.215		
Profit before provision for taxes on income	£ 17,539:18: 4	3.025 shs.	£ 23,017:11: 9	4.363 shs.
Provision for Southern Rhodesia taxes on income	6,500: 0: 0	1.121		
Net profit for the year	£ 11,039:18: 4	1.904 shs.	£ 23,017:11: 9	4.363 shs.

- NOTES: (A) Subsidy was discontinued in September, 1949, upon devaluation of Sterling currencies.
- (B) It will be noted that the profit shown above is £11,039.18.4, whereas on Statement 3 the equivalent in Canadian dollars is a loss of \$5,799.74. This is due to the following factors—
- (a) Loss on conversion of foreign currencies.
 - (b) The depreciation and deferred development provisions in Statement 3 on Page Eleven have been determined on the basis of the rates of exchange in effect at the dates the expenditures on the fixed assets were made.

FROBISHER LIMITED

CONNEMARA MINE Southern Rhodesia—Africa

Report on Operations for the Fiscal Year Ended October 31, 1950

During the year ended October 31, 1950, 115,950 tons of ore averaging 0.233 ozs. per ton were milled, from which 23,032 ozs. of gold were recovered, the gross value of production being £284,061.8.0. This compares with 105,504 tons milled during 1949 from which 21,341.54 ozs. of gold were recovered, having a gross value of £218,289.1.2.

Tonnage treated was at the average rate of 353 tons per day. Due to the delay in the delivery of equipment, additions to the milling plant to permit increased production at a rate of 400 tons per day, were not completed until September. However, this production rate was achieved during the month of October, and should now be maintained. The slight reduction in the grade of ore delivered to the mill, as compared with the previous year, was due to considerable tonnages of slightly lower grade ore being treated from the Zabonkwe section, together with a limited quantity of old sand residues from the Connemara section.

Distribution of tonnage milled from various sources follows:

	Tons	%	Assay
Connemara	97,178	83.8	.241 oz.
Zabonkwe	15,678	13.5	.217 oz.
Sands	3,094	2.7	.056 oz.
	115,950	100.0	0.233 oz.

Development

The following is a summary of underground development accomplished:

	Connemara	Zabonkwe	Total
Drifting, Crosscutting and Raising ...	3,241 ft.	1,500 ft.	4,741 ft.
Shaft Sinking	100 ft.	240 ft.	340 ft.
Stations and Sumps	7,560 cu. ft.	16,100 cu. ft.	23,660 cu. ft.

Connemara Section

Of the total of 3,241 feet of development done in the Connemara Section, 1,917 feet were on reef. Of this approximately 84% was ore averaging 0.31 ozs. per ton. Most of the development work was of a routine nature, and conducted for the purpose of preparing known ore blocks between the 3rd and 6th level for stoping. However, one exploratory drive was advanced northward from No. 3 Shaft to explore the ore zones under the open cuts of No. 6 Section. While some 350 feet of strike length still remains to be explored under these cuts, promising ore possibilities have been indicated with two parallel lenses of ore already disclosed. Indicated lengths and values of these are as follows:

	Length	Width	Value
West Lens	180'	12'	0.215 oz.
East Lens	160'	7'	0.235 oz.

Mining development of known ore bodies on all levels down to and including the fifth has exposed normal ore extensions. However, work on the East Reef between the 5th and 6th levels shows a marked reduction in ore widths, with the ore actually pinching out at about, or just above, the 6th level horizon. This has necessitated a substantial reduction in ore reserve tonnages previously carried between the 5th and 6th levels, but this is partially compensated for by an increase in grade of the recalculated blocks.

A new 3-compartment shaft has been started, approximately 260 feet north-west of No. 3 Shaft, and sunk to a depth of 100 feet. The shaft, designated the Lindsley Shaft, is located centrally with respect to the known Connemara ore bodies, and from it the Connemara ore zones will be developed below the dolerite sill. The shaft is scheduled to be sunk to an initial depth of 1,500 feet.

Zabonkwe, Zarbola Section

Development in the Zabonkwe Section totalled 1,500 feet, of which 657 feet were on reef. Of this, 63% was on ore, which averaged 0.215 ozs. per ton. The most important development was on the 3rd level, which was extended north under the Zarbola ore body. At year end this ore body had been developed over a length of 250 feet, of which 200 feet has an indicated grade of 0.215 ozs. across a width of 49 feet. The full length of this ore body has not yet been exposed, and Surface Borehole No. 9, which cut 33.2 feet of ore averaging 0.195 ozs. at approximately the 3rd level horizon, is still 100 feet to the north of the present drive face.

The main north shaft was completed to a depth of 768 feet, and stations were established at the 6th and 7th levels. A drive from the 6th level has advanced 164 feet to the south, and is expected to reach the projected position of the main Zabonkwe ore body at from 200 to 250 feet from the shaft.

Diamond Drilling

During the year two exploratory holes, Nos. 27 and 28, totalling 1,137 feet, were drilled from the surface. In addition 5,782 feet of routine underground drilling was completed. Bore Hole No. 27, located between Connemara No. 6 Section and Zabonkwe, and Bore Hole No. 28, located 1,200 feet south of No. 1 Connemara Shaft, were drilled to test possible ore extensions in the respective areas. Results were negative in both cases, but further drilling is required on both extensions, and will be undertaken as time permits.

Ore Reserves

Reasonable assured ore reserves as at October 31, 1950, are estimated at 524,200 tons, averaging 0.24 ozs. per ton. The following summarizes the distribution of reserves:

	Connemara	Zabonkwe	Zarbola	Total	Grade oz./ton
Broken ore in stopes	6,110	3,090	-----	9,200	0.225
Blocked out ore	114,100	31,000	-----	145,100	0.235
Partially blocked out or indicated by drilling	240,200	23,000	106,700	369,900	0.24
	<u>360,410</u>	<u>57,090</u>	<u>106,700</u>	<u>524,200</u>	<u>0.24</u>

In addition, there is an estimated 208,000 tons of possible ore. There are also a further 208,000 tons with an indicated gold content of 0.13 ounces, which under present conditions, is below commercial grade. The decrease in reasonably assured ore reserves, as compared with the previous year, results from the restricted amount of new development possible, pending the opening of deeper levels from the Lindsley and Zabonkwe Shafts, and also from tonnage reductions in blocks previously calculated, particularly between the 5th and 6th levels in the Connemara section.

Miscellaneous

During the year the Company exercised its option to purchase the Zarbola Claims. Because of unsatisfactory drilling results as disclosed in last year's report, the Twilley option on the Zazel group of claims which adjoin Zarbola to the north was dropped.

General surface construction during the period included sundry additions to the mill, the erection of three European dwellings, completion of 54 blocks of single dwellings, and 40 married type dwellings in the new permanent African Compound, and construction of a 13 bed African hospital. In addition, and with the co-operation of the European community, a nine hole golf course was constructed. At year end 55 Europeans and 881 Africans were on the Company payroll.

D. C. SHARPSTONE,

General Manager.

