

## CANADA TUNGSTEN MINING CORPORATION LIMITED

Annual report 1982





ORPORATE PROFILE. Canada Tungsten owns and operates one of the world's largest tungsten mines at Tungsten, Northwest Territories. Incorporated in 1959, the Company began surface mining operations in 1962 and moved to underground operations in 1974.

Tungsten, a steel-grey, heavy metallic element occurring in scheelite, has a high melting point and a diversity of uses ranging from filaments for electric lights, high-speed cutting tools to space age metals.

The strength of Canada Tungsten lies in the skills of its people and in its reserves of tungsten which are sufficient to sustain production at a rate of 1,000 tons per day into the 1990s.

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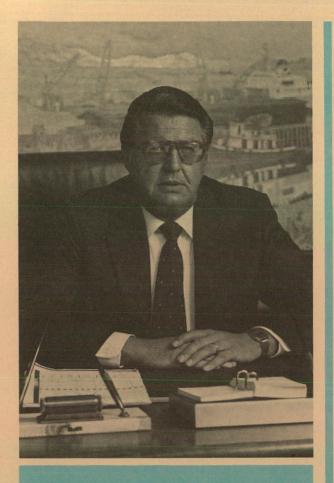
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## **Highlights for five years**



		dollars in millions (except where indicated)				
		1982	1981	1980	1979	1978
For the year	Earnings (loss) from operations	\$ (3.3)	\$ .7	\$34.2	\$21.3	\$27.7
	Net earnings (loss)	(8.5)	2.8	23.0	16.5	20.2
	Dividends declared	2.2	6.0	6.0	5.0	5.0
	Capital expenditures and investments	5.7	12.2	14.6	19.8	13.5
	Exploration charged to operations	1.8	2.8	4.3	2.0	1.1
	Net earnings (loss) — \$/share	\$(1.70)	\$0.56	\$4.60	\$3.31	\$4.05
	Dividends declared — \$/share	0.45	1.20	1.20	1.00	1.00
	Ore milled — tons 000	361	234	349	272	195
	Grade — % WO <sub>3</sub>	1.28	1.40	1.45	1.58	1.96
	Recovery — % WO <sub>3</sub>	86.6	84.5	87.0	84.2	83.5
	Production — STU* 000	395	277	442	361	318
	LMB average price — US \$/STU*	\$ 96	\$ 130	\$ 131	\$ 126	\$ 130
At year-end	Cash	\$	\$ 1.5	\$26.0	\$ 5.6	\$20.9
	Total working capital	16.4	16.3	29.4	21.3	24.1
	Total assets	81.1	90.6	100.2	80.0	68.0
	Long-term debt	4.9				
	Shareholders' equity	63.1	73.8	77.0	60.0	48.5
	Book value — \$/share	\$12.65	\$14.80	\$15.43	\$12.03	\$ 9.72
	Quoted market value — \$/share	14.00	25.00	41.00	21.75	22.12
	Number of shareholders	874	927	957	1,015	1,089
	Number of employees	233	267	245	238	209

<sup>\*</sup>The STU is the short ton unit of 20 pounds avoirdupois of tungsten trioxide (WO<sub>3</sub>).



Report to the shareholders

affected during 1982 by weak demand and declining prices. Despite tungsten's relatively stable performance during most of 1981, the deep economic recession affected all of our markets in 1982. For some metals, the recession has been the worst in fifty years. By the end of 1982, the market price for tungsten was the lowest since 1974 and, in constant dollars, had not been lower since the early

A net loss of \$8.5 million or \$1.70 per share was recorded in 1982 as compared with net earnings of \$2.8 million or \$0.56 per share in 1981. The 1981 results were adversely affected by a six month strike which was settled in mid-May, 1981. During 1982, it was found necessary to write-down the carrying values of the company's investment in Queenstake Resources Ltd. and its Dublin Gulch assets. Without these write-downs, the net loss for 1982 would have been \$2.6 million or \$0.52 per share.

#### **DEALING WITH ADVERSE TIMES**

1960s.

The London Metal Bulletin average quotation by the end of 1982 had fallen to US \$73 per short ton unit (STU), which was 44 percent below the US \$130/STU average for the year 1981 and was also well below the US \$96/STU average for the entire year 1982. Demand fell considerably, especially in the second half of 1982. As much of the demand for tungsten is based on such activities as drilling for oil, gas and other minerals and re-tooling by manufacturers, the market recovery for tungsten will tend to lag economic recovery generally. However, low customer inventories will be a positive factor for prices when demand increases.

At December 31, 1982, Canada Tungsten was the only tungsten mine operating in North America. However, the company's mining and milling operations at Tungsten, N.W.T., were closed effective January 22, 1983 and are expected to

resume only after there has been an adequate improvement in market conditions. Meanwhile, customers will be supplied from inventories.

During the shut-down, activities are scheduled to improve future productivity and operating efficiencies. Improvements are being implemented in a number of areas, including mine planning, mining methods, maintenance and cost controls.

Negotiations for new labor contracts are underway to replace those which will expire on February 28, 1983. The contribution to be made by the workforce will be very important in maintaining Canada Tungsten's position as a competitive producer in difficult times.

#### **DETAILED REVIEWS**

A review of operations appears on page 4 and a financial review is given on page 5.

#### DIVIDENDS

During 1982, your company paid dividends of 45¢ per share for a total of \$2.2 million, compared with \$1.20 per share (\$6.0 million) in 1981. A dividend of 30¢ was paid in the first quarter, 15¢ in the second quarter and none since.

#### **QUEENSTAKE RESOURCES**

Your company has a 45 percent interest in Queenstake Resources Ltd., which has placer gold operations in the Yukon and is active in exploration for gold and other minerals. In September 1982, the carrying value of this investment was written down by \$3.9 million to \$7.0 million based on an evaluation of its assets at that time.

Queenstake made a small profit in 1982. Improved gold prices should help Queenstake's placer gold operations.

#### **DUBLIN GULCH**

The company's placer gold holdings at Dublin Gulch, Yukon, were written down by \$3.2 million to \$2.0 million in September based on the reserves and market outlook then. In 1982, the property was not operated but drilling confirmed reserves and operations are expected to be viable in the future. Some preparatory work is planned for 1983. The garnet-skarn tungsten deposit at Dublin Gulch continues to be of interest.

#### **ORE RESERVES**

A major re-evaluation of ore reserves at Tungsten, N.W.T. was carried out during 1982. The mineable ore reserve was estimated to be 3.04 million tons at 1.32% WO3 at December 31, 1982. This compares with the 3.55 million tons at 1.50% WO3 estimated at December 31, 1981. More definitive mining plans and increased allowance for dilution accounts for most of the differences after taking account of production of 361,000 tons in 1982.

#### LOOKING AHEAD

We are now emphasizing exploration work at the existing minesite and nearby which we expect will extend the life of the Tungsten mine.

We continue to be optimistic about the future of tungsten as it will be an important component in the new maturing high technology industries. Your mine has a significant competitive advantage and your company is well situated, with adequate financial resources, to take advantage of the opportunites which the future will bring.

On behalf of the Board of Directors,

James H. Foreman

President and Chief Executive Officer

Toronto, Ontario, February 18, 1983

## Five years at a glance



# Review of operations

RODUCTION FOR the year was 395,000 short ton units (STU) from 361,000 tons of ore at a grade of 1.28% WO3 compared with 277,000 STU from 234,000 tons of ore at a grade of 1.40% WO3 during 1981. Recovery was 86.6% compared with 84.5% in 1981. The operation was closed by a strike from January through May 1981.

Underground development amounted to 6,800 feet of drifting and 1000 feet of raising. Diamond drilling totalled 41,400 feet including exploration and ore definition. There were no significant new results from underground exploration in 1982.

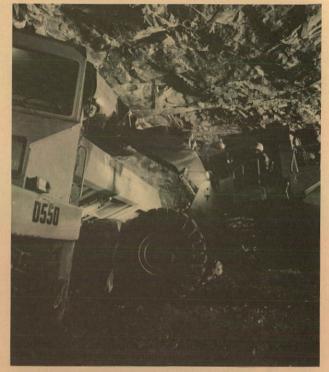
Ground stabilization, always a major concern in any underground operation, was addressed during the year and significant improvements were made. A fill raise driven from underground to the open pit was used to provide fill to the mine.

A second important element in ground control was the construction and placing into operation during the fourth quarter of a hydraulic backfill plant. This plant, which separates the coarser fraction of the mill tails and pumps it underground, placed 33,000 tons of fill in the open stope areas. With the planned commencement of pillar recovery in 1983 and the development of the cut-and-fill mining method in certain areas, the backfill plant is an important addition.

Mine planning was intensified during the year and led to development of improved mining methods and a new long range mining plan.

Modifications to the milling circuit were successful in the reduction of impurities, elimination of cyanide as a reagent and increased recovery. Considerable progress has been made in defining other areas where further improvements in recovery, quality and costs will help offset the lower grade feed from the mine.

The company spent \$1.8 million on exploration during the year as compared with \$2.8 million in 1981. Surface diamond drilling in the mine area gave encouraging results. Drilling in the Dublin Gulch area was also sufficiently encouraging to warrant further drilling.





## Financial review



#E LOSS from operations in 1982 was \$3.3 million as compared to earnings from operations of \$0.7 million in 1981. In 1981, operating results had been depressed by a strike which lasted until May, 1981. In 1982, operating earnings were adversely affected by the deterioration in the market for tungsten. In addition, the charge for depreciation and amortization increased to \$5.7 million in 1982 from \$2.9 million in 1981 due to depreciation commencing on a number of assets put into use in 1982 as well as to depreciation and amortization based on the higher production in 1982.

Interest income less interest expense in 1982 was \$0.2 million whereas 1981 benefited from interest income of \$3.2 million.

The write-downs of the carrying values of the investment in Queenstake Resources Ltd. and of the Dublin Gulch assets totalled \$7.1 million in 1982.

There was a loss of \$10.2 million, before income taxes and royalties, in 1982 as compared to earnings of \$4.1 million in 1981. After income taxes and royalties, the net loss was \$8.5 million in 1982 whereas 1981 recorded net earnings of \$2.8 million.

After taking account of an increase in inventories offset by a reduction in outstanding accounts receivable, operations in 1982 generated cash of \$0.3 million. Income tax recoveries added \$1.2 million. There were outlays of \$5.7 million for fixed assets and \$2.2 million for dividends. The cash balance of \$1.5 million at the commencement of 1982 was fully utilized and borrowings of \$4.9 million were effected in the year.

During 1982, the company negotiated with two Canadian banks new revolving lines of credit totalling \$30 million in U.S. or Canadian funds which are available for at least 3 years. These lines of credit are adequate for the company's foreseeable needs.

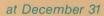
## Statements of earnings and retained earnings

for the years ended December 31



			In thousands (e.	xcept per share)
		Note	1982	1981
Earnings	From operations before the undernoted	1	\$ 4,217 (5,712) (1,759)	\$ 6,388 (2,919) (2,807)
	Earnings (loss) from operations		(3,254)	662
	Interest income, net		165 18	3,242 200
	Write-down of carrying values	3	(7,081)	
	Earnings (loss) before income taxes and royalty		(10,152)	4,104
	Current income taxes	4	4	4
	Northwest Territories royalty	4	(1,691)	1,250
			(1,687)	1,291
	Net earnings (loss)		(8,465)	2,813
Retained earnings	At beginning of year		70,234	73,409
	Dividends		(2,246)	(5,988)
	Retained earnings at December 31		\$59,523	\$70,234
Per share	Net earnings (loss)		\$ (1.70)	\$ 0.56
	Dividends		\$ 0.45	\$ 1.20

## **Balance sheets**



Director



			In the	ousands
		Note	1982	1981
Assets	Cash and equivalent		\$	\$ 1,484
	Accounts receivable		4,873	9,309
	Inventories	5	15,175	9,789
	Income taxes recoverable			1,289
	Prepaid expenses		134	137
	Current assets		20,182	22,008
	Investments	6	8,369	12,277
	Property, plant and equipment, less	7	50,238	51,212
	accumulated depreciation		30,230	31,212
	Deferred costs, less accumulated amortization	8	2,291	5,058
			\$81,080	\$90,555
Liabilities	Accounts payable and accrued liabilities		\$ 3,767	\$ 5,580
	Northwest Territories royalty payable			108
	Current liabilities		3,767	5,688
	Long-term debt	9	4,917	
	Deferred income taxes		9,256	11,016
			17,940	16,704
Shareholders' equity	Capital stock	10	3,617	3,617
	Retained earnings		59,523	70,234
Approved by the Board of Directors			\$81,080	\$90,555
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Director

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## Statements of changes in financial position

for the years ended December 31



		In thousand	
		1982	1981
Sources of cash	Operations  Earnings (loss) from operations  Add — depreciation and amortization  — other non-cash charges	\$ (3,254) 5,712 620	\$ 662 2,919 15
	Working capital provided by operations	3,078	3,596
	Changes in working capital (excluding cash) —  Decrease in accounts receivable	4,436 (5,386) (1,810)	2,618 (4,966 2,971
	Cash provided by operations, before income taxes	318	4,219
	Financing activities  Long-term debt	4,917	
	Other sources of cash Interest income, net	165 1,220	3,242
		1,385	3,253
	Total sources	6,620	
Uses of cash	Fixed assets and deferred costs	5.744	10.100
	Property, plant and equipment	5,741 5	12,169 49 1,710
		5,746	13,928
	Dividends	2,246	5,988
	Income taxes and royalties paid	112	12,089
	Total uses	8,104	32,005
Changes in cash	(Decrease in cash)	(1,484) 1,484	(24,533 26,017
	Cash, December 31	\$	\$ 1,484

## **Notes to financial statements**

(in thousands except where indicated)



## 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### **Accounting standards**

The accounting policies of the company conform in all material respects to international accounting standards and with generally accepted accounting principles in Canada except that sales are not stated as permitted by an order obtained pursuant to Section 79 (a) (i) of the 1978 Ontario Securities Act.

#### **Inventories**

Inventories of concentrates are valued at the lower of cost or net realizable value. Cost is determined on the moving average basis and does not include depreciation or amortization. Materials and supplies are valued at lower of cost and replacement cost.

#### Investments

The investment in Queenstake Resources Ltd. is accounted for by the equity method after providing for a loss in value. Oil and gas investments are considered to be distinct from mining operations and are valued at cost reduced by the relative income tax deductions. Other investments are valued at cost.

#### Property, plant and equipment

Property, plant and equipment are carried at cost less amounts written off. Repairs and maintenance are charged to operating expense as incurred. Replacements and major improvements are capitalized.

Depreciation is computed primarily on the unit of production method by reference to the estimated remaining economic life of the ore reserves, determined to be approximately nine years. However, items of shorter life, principally mobile equipment, trailer bunkhouses and small vehicles, are depreciated on a straight-line basis over their estimated useful lives.

#### **Deferred costs**

Acquisition costs of major mining and petroleum properties are deferred until a property is abandoned or placed into production.

Costs of exploring for new ore occurrences are charged against earnings as incurred. Costs incurred on indicated economically recoverable reserves are deferred.

Preproduction development and acquisition costs are deferred and amortized on the unit of production basis over the estimated lives of the reserves.

#### Income taxes

The tax allocation method is followed. Deferred income taxes relate primarily to depreciation of property, plant and equipment and amortization of deferred costs. Investment tax credits reduce the current year's charge for income taxes.

#### Foreign currencies

Monetary assets and liabilities in foreign currencies are translated to Canadian dollars at the year-end rates of exchange. Exchange gains and losses, including those arising on translation, are included in determining current earnings.

#### 2. TEMPORARY CLOSURE OF OPERATIONS

The company's operations were closed as from January 22, 1983. It is expected that operations will not resume until there is a significant improvement in market conditions.

#### 3. WRITE-DOWN OF CARRYING VALUES

In September 1982, the company's investment in Queenstake Resources Ltd. was written down by \$3.9 million to \$7.0 million and the fixed assets and deferred costs of its Dublin Gulch placer gold holdings were written down by \$3.2 million to \$2.0 million.

#### 4. INCOME TAXES AND NORTHWEST TERRITORIES ROYALTY

The rate of income tax expense (recovery) on earnings before income taxes varies from the combined statutory federal, provincial and territorial rates as follows:

	1982		1981	1
		%		%
Income tax at statutory rates	\$(4,903)	(48)	\$1,870	48
Impact of — Write-down of assets Lower effective tax	1,890	18		
rates of prior years Resource allowance Investment tax credits	1,299	13	(442) (172)	(11) (5)
Other	27		(2)	
Income taxes (recovery)	\$(1,687)	(17)	\$1,254	32

The recovery of deferred income taxes in 1982 is calculated at the average rate of accumulation of deferred taxes in prior years. This rate is significantly less than the statutory rate by reason primarily of the utilization in those years of resource allowances, earned depletion and investment tax credits.

		IES

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	1982	1981
Concentrates	\$11,945	\$ 6,460
Materials and supplies	3,230	3,329
	\$15,175	\$ 9,789
		7 7 7 10
6. INVESTMENTS		
	1982	1981
Investment carried on the		
equity basis —		
Queenstake Resources Ltd. (45% owned) (note 3)	\$7.010	¢10.001
	\$1,010	\$10,931
Oil and gas investments, at cost less related		
tax deferrals —		
1% net profit interest in		
Beaufort Sea properties	5,000	5,000
Shares of Beaufort Petroleum		
Investment Limited	5,200	5,200
Tax deferrals	(8,932)	_(8,932)
	1,268	1,268
Other investments, at cost	83	78
	\$8,369	\$12,277

Tax benefits from exploration expenses, frontier allowance and depletion on oil and gas investments were not applied to reduce income taxes in the statement of earnings in the years they were claimed. Instead, they have been classified as tax deferrals arising on timing differences and deducted from the costs of the investments.

The quoted market values at December 31, 1982 were Queenstake Resources Ltd. \$5.1 million (1981 — \$5.3 million) and Beaufort Petroleum Investment Limited \$0.1 million (1981 — \$0.1 million). These values are not necessarily indicative of realizable values.

## Notes to financial statements (continued)

(in thousands except where indicated)



7. PROPERTY, PLANT AND EQUIPMENT						
	1982	1981				
Land Buildings, plant and equipment Construction in progress Accumulated depreciation	\$ 545 68,779 3,330 72,654 (22,416)	\$ 545 53,575 14,723 68,843 (17,631)				
	\$50,238	\$51,212				
8. DEFERRED COSTS  Tungsten operations —    Deferred preproduction and development    Less accumulated amortization	\$8,590 (6,299) 2,291	\$9,260 (6,034) 3,226				
Dublin Gulch placer gold operations (note 3) — Deferred preproduction and						

#### 9. LONG-TERM DEBT

Under long-term revolving credit agreements the company may borrow up to \$30 million in U.S. or Canadian funds until at least 1985. At December 31, 1982, U.S. \$4 million (equivalent to Cdn. \$4.9 million) was outstanding under this arrangement. The average interest rate on the outstanding debt was 9.85%.

10. CAPITAL STOCK		
	1982	1981
Authorized		
10,000,000 shares without		
nominal or par value		
Issued and fully paid		
4,990,000 shares	\$3,617	\$3,617

### 11. MARKETING ARRANGEMENTS WITH RELATED PARTY

There is an exclusive sales agency agreement with AMAX Inc. which, through a wholly-owned subsidiary, controls 65% of the company's shares. Commissions paid under this agreement amounted to 3.3% of sales during 1982 (1981 — 3.9%).

The company has substantially all of its operations in the mining industry. Its sales are primarily export sales of

tungsten concentrates and were distributed geographically (by value of sales) as follows:

	1982	1981
	%	%
U.S.A	44	50
Western Europe	43	35
Other	13	15
	100	100

Of total sales during the year, 33% (1981 — 30%) were to AMAX Inc.

#### 12. LOANS

The company has housing loans outstanding to senior officers of \$66 thousand (1981 — \$119 thousand).

#### 13. COMMITMENTS

The company is committed under various operating leases, principally for office premises expiring in 1986 and 1988 and for items of mining equipment expiring in 1985. Minimum commitments, in millions of dollars, are as follows:

1983 \$0.6 million, 1984 \$0.5 million, 1985 \$0.4 million, 1986 \$0.4 million, 1987 \$0.3 million, thereafter \$0.4 million.

## Quarterly data (unaudited)

\$2,291

\$5,058

Quarter 1981 —	Earnings (loss) from operations	Net earnings	Net earnings (loss) per share	Dividends per share	Stock prid High	ces per share Low
First Second	\$ (728) (1,124)	\$ 247 14	\$ 0.05	\$0.30 0.30	\$43 40%	\$32½ 34½
Third Fourth	2,565 (251)	2,074	0.42	0.30	40 32½	20 21½
1982 —	\$ 462	\$2,813	\$ 0.56	\$1.20	\$43_	\$20_
First Second	\$ 4,114 (279)	\$ 2,639 (10)	\$ 0.52	\$0.30 0.15	\$25 19	\$18 13
Third Fourth	(2,558) (4,531)	(7,447)	(1.49) _(0.73)		20½ 17%	13 13½
	\$(3,254)	\$(8,465)	<u>\$(1.70)</u>	\$0.45	\$25	\$13

# Auditors' report to the shareholders

We have examined the balance sheet of Canada Tungsten Mining Corporation Limited as at December 31, 1982 and the statements of earnings and 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.

As disclosed in note 1 to the financial statements, the company has obtained permission from the Ontario Securities Commission to omit disclosure of sales in the statement of earnings and retained earnings for the years ended December 31, 1982 and 1981. In this respect, the financial statements are not in accordance with generally accepted accounting principles.

In our opinion, except for the omission of sales as described in the preceding paragraph, these financial statements present fairly the financial position of the company as at December 31, 1982 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.

Coopers & Lybrand

CHARTERED ACCOUNTANTS

Vancouver, B.C. January 28, 1983



# **Corporate** directory

#### DIRECTORS

Douglas A. Berlis, Q.C.\* Toronto, Ontario J. M. Richard Corbet\* Toronto, Ontario James H. Foreman Vancouver, British Columbia John W. Goth Greenwich, Connecticut Pierre Gousseland Greenwich, Connecticut George B. McKeen Vancouver, British Columbia James B. Redpath Toronto, Ontario H. A. Sawyer, Jr.\* Greenwich, Connecticut Malcolm A. Taschereau

\*Member of Audit Committee

Toronto, Ontario

#### **OFFICERS**

James B. Redpath. Chairman of the Board James H. Foreman. President and Chief Executive Officer Bryce M. A. Porter, Vice-President Finance and Administration Douglas W. Thompson, Vice-President of Operations Mervyn K. Coffin, Secretary and Treasurer John J. Sutherland, Jr., Controller and Assistant Treasurer Dorothy I. Chisholm. Assistant Secretary

#### **OPERATING MANAGEMENT**

David B. Armstrong, Mine Manager William J. Fotheringham. General Superintendent Peter Bouma. Mill Superintendent A. Robert O'Dell. Employee Relations Superintendent Randolph T. Parker. Mine Controller Donald Porter, Plant Superintendent Lomer J. D'Aigle. Exploration Manager Vancouver, B.C. John T. O'Neill Purchasing Manager Vancouver, B.C.

#### **COMPANY OFFICES**

to the Executive Office.

Executive & Exploration Office:
Suite 1600 - Oceanic Plaza,
1066 West Hastings Street,
Vancouver, B.C. V6E3X1
Registered Head Office:\*
Suite 2700 - 1 First Canadian Place
Toronto, Ontario M5X 1H1
Mine:
Tungsten, N.W.T. X0H 0A0
Leach Plant and Warehouse:
80 Niobe Street
North Vancouver, B.C. V7J 2C9
\*Please direct all communications

#### **AUDITORS**

Coopers & Lybrand Vancouver, British Columbia

#### SOLICITORS

Russell & DuMoulin Vancouver, British Columbia

#### **BANKERS**

Canadian Imperial Bank of Commerce Main Branch Vancouver, British Columbia

The Royal Bank of Canada Main Branch Vancouver, British Columbia

#### SHARES LISTED

Toronto Stock Exchange

#### REGISTRAR AND TRANSFER AGENT

Canada Permanent Trust Company Toronto-Vancouver-Montreal

#### VALUATION DAY

The price of the Company's shares was \$1.55 per share on December 22, 1971, established by Revenue Canada as Valuation Day.

#### ANNUAL MEETING

The Annual Meeting of the Shareholders of Canada Tungsten Mining Corporation Limited will be held on Monday, April 18, 1983, at 10:30 a.m. in the Royal York Hotel, Toronto, Ontario.

CANADA TUNGSTEN
MINING CORPORATION LIMITED

(Incorporated under The Business Corporation Act, Ontario)



