

BARRINGER RESEARCH

ANNUAL REPORT 1972

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DR. D. RICHARD CLEWS, EXECUTIVE VICE PRESIDENT
DAVID A. WHITEMAN, VICE PRESIDENT
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It is with deep regret that we report the death of Thurne Parks in November 1972. Mr. Parks, a specialist in mining exploration, was a director of Barringer Research since its incorporation in 1961, and he played an important role in the formation and continued growth of the Company. His advice and experience will be missed.



BARRINGER RESEARCH NEWS

TORONTO -- DR. ANTHONY R. BARRINGER, PRESIDENT OF BARRINGER RESEARCH LTD. (BRL) REPORTED FRIDAY (MARCH 23) THAT THEY HAVE ACQUIRED AN INTEREST IN A FIJIAN PORPHYRY COPPER PROPERTY.

THE PROPERTY IS CURRENTLY BEING DRILLED TO DETERMINE ITS COMMERCIAL VIABILITY.

BRL PAID \$30,000 FOR AN OPTION AND AN ADDITIONAL \$70,000 WILL BE THE PURCHASE PRICE FOR A 4-1/2 PERCENT INTEREST. BRL MAY MAINTAIN ITS SHARE BY PAYING A PRORATED PART OF FUTURE EXPLORATION AND PROPERTY DEVELOPMENT EXPENSES.

THE RESULTS OF AN INITIAL 4000 FEET OF WIDELY SPACED DRILLING OVER A ONE-SQUARE MILE AREA, IN THE JUDGEMENT OF BRL MANAGEMENT, WARRANT PARTICIPATION IN FURTHER DRILLING. BARRINGER'S SHARE IS \$9,800 OF THE ESTIMATED \$140,000 COST IN THIS ADDITIONAL DRILLING.

IF THE RESULTS OF THE ADDITIONAL DRILLING ARE COMPARABLE TO THE RESULTS OF THE INITIAL DRILLING, STILL MORE WILL BE REQUIRED. SUBSTANTIAL ADDITIONAL DRILLING, AT SUBSTANTIAL ADDITIONAL COST TO BRL, WOULD BE NECESSARY TO PROVE THE EXISTANCE OF A COMMERCIAL COPPER DEPOSIT.

BARRINGER RESEARCH LTD IS THE TORONTO-BASED MINERAL EXPLORATION AND RESEARCH SUBSIDIARY OF BARRINGER RESEARCH INC., A U.S. FIRM WHOSE SHARES ARE TRADED OVER-THE-COUNTER WITH PRINCIPAL OUTLETS IN NEW YORK (NASDAQ SYMBOL IS BARR).

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The above release was distributed on March 23, 1973, and reports on the expansion of Barringer interests in Fiji. This participation is indicated in the diagram outlining joint ventures on page 8 of the 1972 Annual Report. Barringer's option agreement has resulted from extensive exploration conducted in Fiji since 1968.



Rexdale Corporate Offices, December 1972.

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BARRINGER RESEARCH

Dear Shareholder:

At Barringer Research, discovery is our business. It is the nature of research that unexpected discoveries occur, that new directions must be followed, that change is expected. It is the difficult task of research management to proceed on a balanced course which maintains the health of the enterprise, yet takes advantage of new knowledge. The events of 1972, in total, exemplify the difficulty and excitement this work entails.

It is helpful in presenting the financial results of the year, to reiterate the basic objectives of the Company. We seek to obtain significant equity positions in commercial deposits by utilizing the most advanced earth-science techniques and instrumentation toward this goal and in the development of proprietary products.

Revenues for 1972 were \$3,911,927; an increase from \$3,557,233 in 1971. Because of the income derived from the sale of shares held in Combustion Equipment Associates and a decision to quantify the value of future joint-venture participations in hydrocarbon and mineral properties, it was decided in 1972 to amortize all past accumulated research and development expenses that did not have an income-earning potential in the short-term future. Since June 1970, when Company-funded research and development ceased, the remaining R & D expenses have placed an amortization burden of approximately \$300,000 against each year's earnings. In an effort to present the real earnings capability of the Company more clearly in the future, it was decided to write off \$875,966 of existing research and development expenditures in 1972. The result is a net loss of 68¢ per share compared to what would have been a profit of \$36,000 or 5¢ per share, if previous amortization rates had been used.

A new Barringer-proprietary exploration system, AIRTRACE,[®] was placed into operation in 1972. In the latter part of the year field evaluations of this new Airborne Geochemical Prospecting System were continued over localities of known mineralization and hydrocarbon deposits. Concurrent with the data gathering activity, we have been proceeding with an aggressive and world-wide patenting



Dr. Clews, Dr. Barringer and Mr. Whiteman.

program which is intended to provide comprehensive coverage for the total system as well as protection for many key engineering features.

Naturally, to protect the proprietary position of the Company, release of information on the AIRTRACE system must be strictly limited until analyses of its extensive trials are completed and our patenting program has reached an advanced stage. Initial evaluation is encouraging. It is anticipated that in addition to significant equity participations, AIRTRACE royalties could represent a long-term income potential such as is now characterized by the Barringer INPUT® Geophysical Prospecting System. INPUT Systems, the invention upon which the Company was founded, have returned \$1,931,000 in rental and line mile royalties over the past eight years.

Joint-venture exploration operations are now an integral and increasing part of Barringer's operation. They were an outgrowth of early contract services offered to the mining industry. As the expertise of the combined geological-geophysical-geochemical staff developed, it supported exploration programs managed by Barringer and financed by partners. Both share in any ore found. The two initial joint ventures, on the Fiji Islands and in Western Canada, have matured beyond the exploration phase. Several targets have been optioned to mining firms, and their drilling programs have begun. We are currently actively considering the various methods of financing our equity participations which could result from these drilling programs. It is now possible to place a conservative estimate on the residual value of these joint projects. In 1972, these participation options have been set up as corporate investments in the amount of \$426,690, and a reserve for deferred income.

It is the custom of the mining industry that exploration and exploratory drilling is done with a minimum of publicity. It is not possible for Barringer to report on the results of drilling programs until such data are publically announced by those groups holding the options. However, drilling is underway in both Canada and Fiji.

At year's end negotiations for new joint-venture programs in Australia, South Africa and the United Kingdom were well advanced. These new 1972 programs have evolved beyond the program-management work of the past two years. They emphasize the unique capability of Barringer's airborne exploration systems and the interpretational abilities of the staff. Now major mining companies are also funding the field work, and Barringer will obtain a significant interest which is free-carried to the stage where the existence of an economic deposit has been verified. This participation is the hallmark of our joint-venture activity.

In the air pollution field Barringer's electro-optical analytical instruments for providing environmental data have become self-supporting. The COSPEC® Remote Sensor continues expanded use in the Far East, North America, and in Europe. In 1972 nine instruments were delivered, and royalties were received for the exclusive use of the equipment as a service. In Central America and in Japan the COSPEC was used to measure emissions from volcanoes.

By years' end sixteen Heavy Water Monitors for use in nuclear power plants had been delivered or were nearing completion.

An airborne version of a correlation interferometer, designed to measure carbon monoxide, was built for The General Electric Company. This is part of a NASA-sponsored project for flight evaluation prior to the intended use of this instrumentation as a space-mounted pollution monitor.

The losses accepted in 1972 will allow us to communicate our success more directly in the future. This action has been taken during a year when the major efforts of the Company remain still to be completed. It is a step taken with firm confidence in the economic potential of our current production and developments, our patenting position and our joint-ventures.

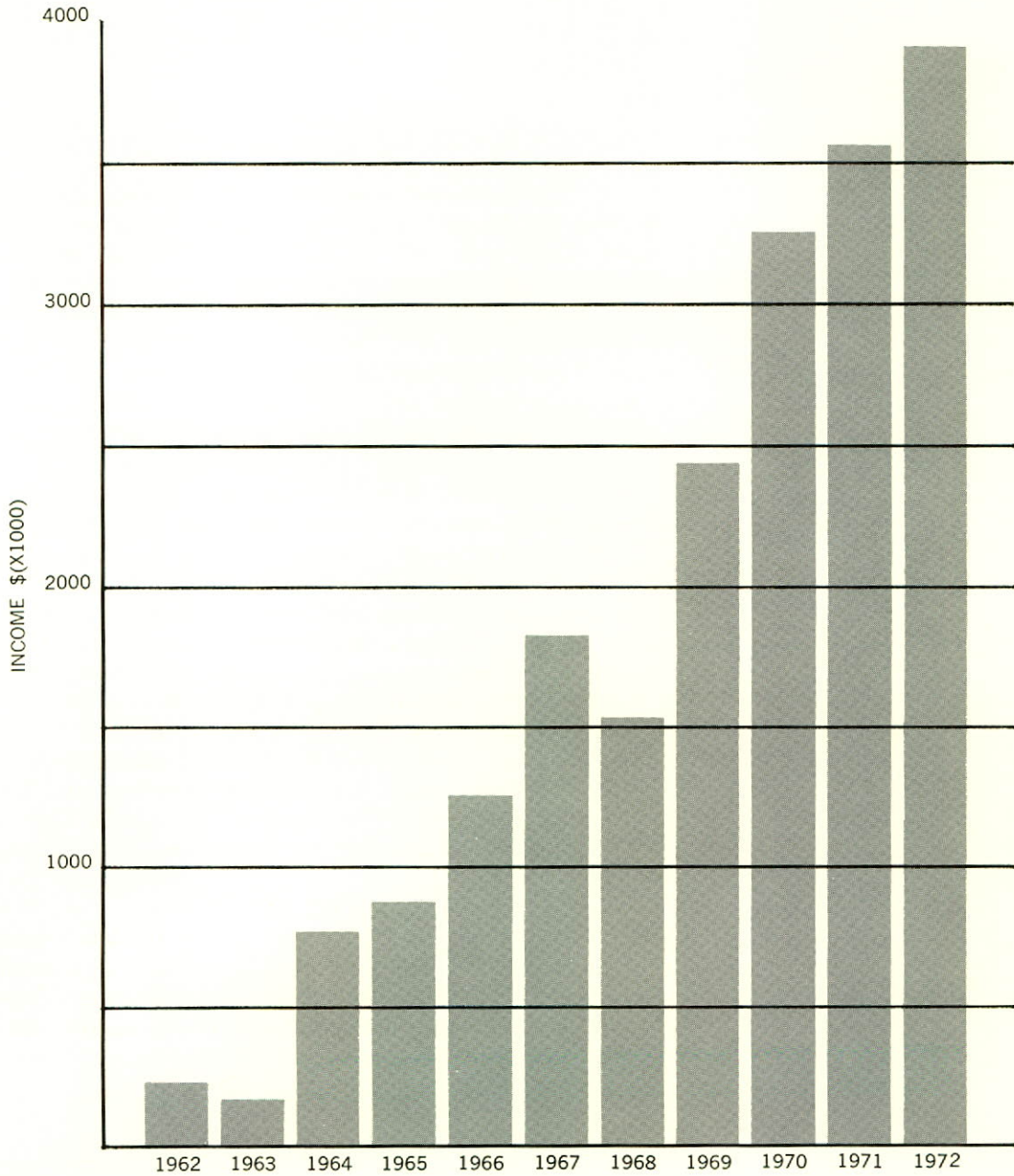
Sincerely,



A. R. BARRINGER

April 2, 1973

BARRINGER RESEARCH GROSS INCOME





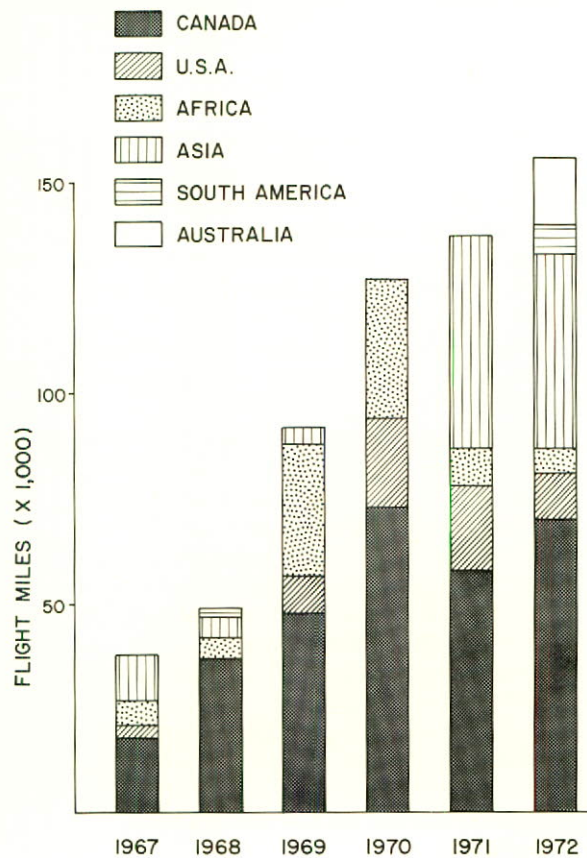
The most recent installation of the Mark VI INPUT System utilizes the Short Brothers STOL Aircraft; using auxiliary fuel tanks, the aircraft can survey the entire day without landing.

The INPUT® Airborne Geophysical Prospecting System is a unique electromagnetic exploration system used to identify below-surface electrical conductors. Metallic ore has this characteristic, and economic deposits are located by this means. INPUT surveys are conducted under licences to geophysical contractors; line-mile royalties are returned to the Company.

This patented invention, now honored as the preeminent "em" system by the geophysical profession, has been flown throughout the world since it prompted the formation of the Company. In 1972, the deeper-penetration Mark VI system was available for use by the licensees.

In 1972, the Iso-Copperfields of high-grade copper, and zinc discovery in the Province of Quebec was attributed to the INPUT results from surveys flown for the Quebec government by our licensee, Questor Surveys Ltd.

WORLDWIDE INPUT^R SURVEYS





Tokyo air pollution scientists discuss COSPEC (in rear of wagon) with JASCO personnel during mobile measurement study in May 1972.

The COSPEC® Remote Sensing Air Pollution Monitor is a patented electro-optical chemical analyzer used to map and measure the amount of important noxious gases in the atmosphere. Now, five years since its introduction, the applications for this innovative multi-purpose device have gained technical acceptance. Income in the form of equipment sales and royalties on services increased to \$176,000 in 1972.

Determination of gas emissions (from *outside* the property of the source), the mapping of the extent and level of industrial or regional pollution, the measure of ambient air concentrations between two points, and the ability to measure pollution concentrations at stack exits (from afar) are some of the uses of the COSPEC sensors.

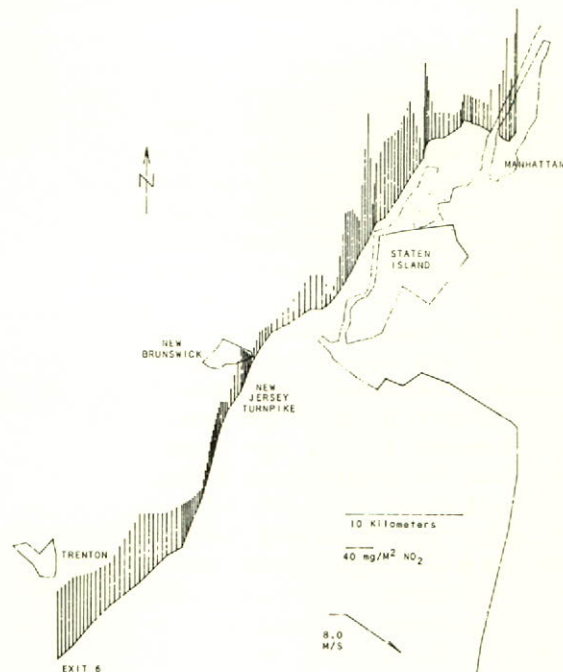
Licenses for the use and sales of the COSPEC equipment are:

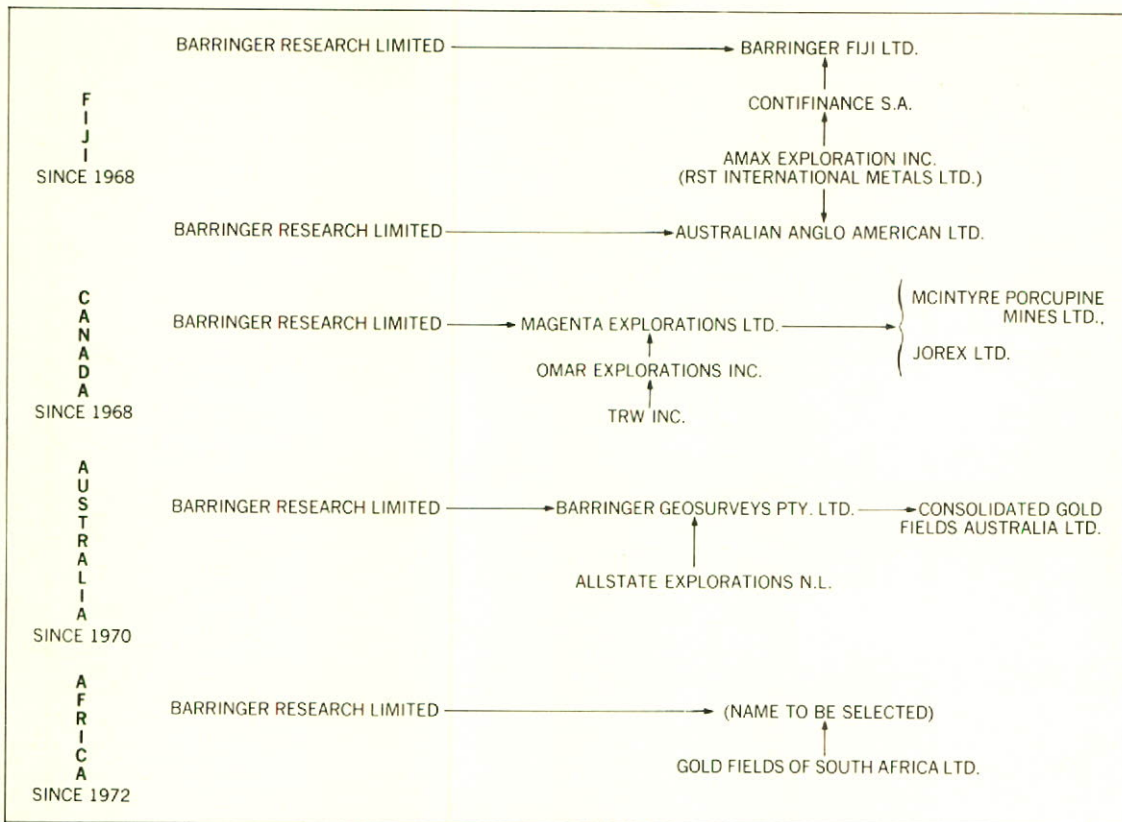
Environmental Measurements, Inc.
(United States)

ERA Sciences, Ltd. (Western Canada)

Japan Spectroscopic Company, Ltd.
(Japan)

Maps of the distribution of a pollutant give graphic impact to the relationship between source and ambient air quality. Data for the sample map, gathered along the New Jersey Turnpike, show the regional presence of NO_2 and quantify this photochemical constituent.





These joint-venture programs are presently in progress by the Company.

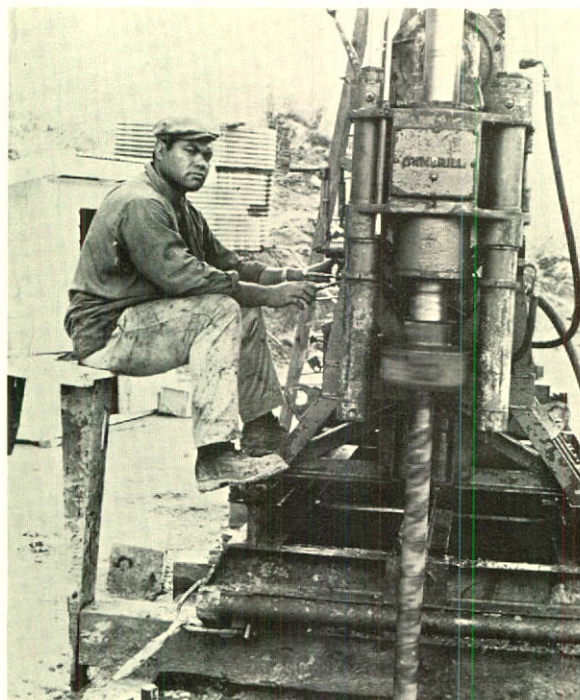
Joint-ventures, in which Barringer Research uses the breadth of its geological, geochemical and geophysical experience for the conduct of multi-disciplinary exploration programs, are a growing source of income. The central element of each is that Barringer's unique professional capabilities justify a financial participation in any of the findings.

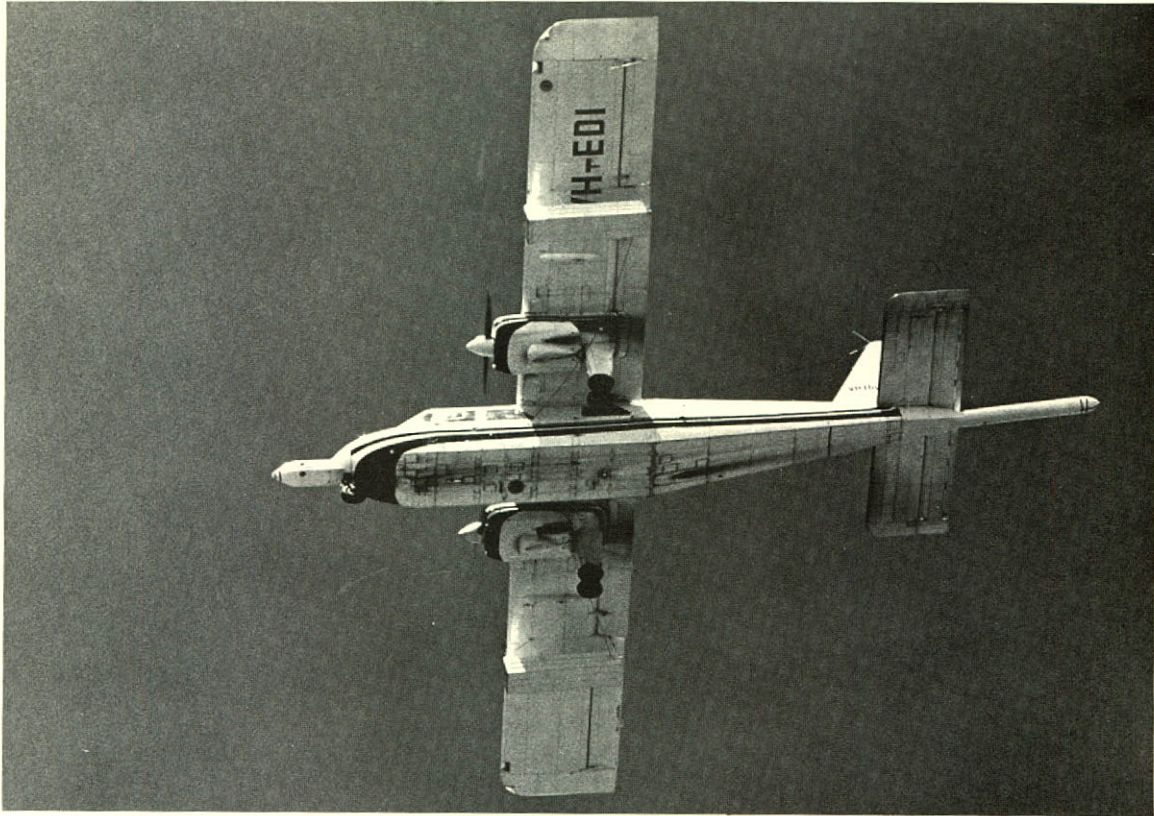
This ownership in the end-result of exploration is in addition to the totally supported cost of the operation.

Each program is quite different. They have ranged from project management, with the supply of proprietary systems and subsequent data analysis and interpretation, to the use of specialists to operate the Barringer systems. These teams are assigned to work directly with established exploration departments of international mining companies.

Because of the magnitude of each program, the resulting equity portion in the properties changes over time. The above diagram shows the expansion of the current joint-ventures.

Fijian drilling in progress.





The new Airtrace System has been installed on fixed wing and helicopter platforms. This installation is designed for long distance operational surveys.

The AIRTRACE® Airborne Geochemical Prospecting System is a multiple-capability exploration system used to identify chemical halos related to valuable deposits. The hardware has been under development in the Barringer laboratories for over two years.

Extensive field tests over known sites around the world are in progress and have been since mid-1972. Details of the results are under analysis. While preliminary evaluation supports continued investment, this information remains proprietary to the Company at this time. Exploration projects are being negotiated only after confidential agreements have been executed.



BARRINGER RESEARCH INC. AND CONSOLIDATED SUBSIDIARIES

CONSOLIDATED BALANCE SHEET AS AT DECEMBER 31, 1972 (with 1971 figures for comparison)

ASSETS

	1972	1971
CURRENT ASSETS:		
Cash	\$ 150,768	\$ 29,453
Short-term deposit	—	125,000
Accounts receivable—trade (less allowance for doubtful accounts, 1972—\$56,168; 1971—\$45,169)	739,460	565,168
Inventories (Note 2)	612,698	447,777
Deposits, advances and prepaid expenses	<u>44,671</u>	<u>30,170</u>
Total current assets	<u>1,547,597</u>	<u>1,197,568</u>
 INVESTMENTS AND ADVANCES:		
Subsidiaries not consolidated (Note 1)	12,901	27,522
Non-associated companies (Note 3)	33,505	645,572
Mining exploration ventures (Note 4)	<u>723,690</u>	<u>—</u>
Total investments and advances	<u>770,096</u>	<u>673,094</u>
 FIXED ASSETS—at cost (Note 5)		
Less accumulated depreciation and amortization	<u>546,334</u>	<u>422,083</u>
Net fixed assets	<u>1,069,980</u>	<u>310,508</u>
 OTHER ASSETS—at cost less amortization (Note 1 (d)):		
Patents and trademarks	86,320	82,275
Research and development expenditures	<u>—</u>	<u>809,889</u>
Total other assets	<u>86,320</u>	<u>892,164</u>
 TOTAL	 <u><u>\$3,473,993</u></u>	 <u><u>\$3,073,334</u></u>

The accompanying notes are an integral part of the financial statements.

LIABILITIES AND STOCKHOLDERS' EQUITY

CURRENT LIABILITIES:	1972	1971
Bank indebtedness (Note 6)	\$ 412,666	\$ 97,340
Convertible subordinated promissory notes due within one year	60,000	120,000
Accounts payable and accrued charges	918,611	695,757
Income taxes	90,000	—
Total current liabilities	1,481,277	913,097
DEFERRED INCOME (Note 4)	426,690	—
LONG-TERM DEBT (Note 7)—Convertible subordinated promissory notes— less amounts included in current liabilities	305,000	365,000
COMMITMENTS AND CONTINGENT LIABILITIES (Note 11)		
STOCKHOLDERS' EQUITY:		
Capital stock (Notes 8 and 9):		
Authorized:		
2,000,000 shares of common stock of 1¢ par value each		
Issued and fully paid:		
855,000 shares	8,550	8,550
Paid-in surplus (Note 14)	1,821,612	1,832,112
Deficit	(562,589)	(38,878)
	1,267,573	1,801,784
Less common stock in Treasury—at cost—90,400 shares	6,547	6,547
Net stockholders' equity	1,261,026	1,795,237
TOTAL	\$3,473,993	\$3,073,334

The accompanying notes are an integral part of the financial statements.

CONSOLIDATED STATEMENT OF LOSS AND DEFICIT
FOR THE YEAR ENDED DECEMBER 31, 1972
(with 1971 figures for comparison)

	1972	1971
NET SALES	\$3,435,360	\$2,544,075
REVENUES FROM RESEARCH CONTRACTS	476,567	1,013,158
Total revenue	<u>3,911,927</u>	<u>3,557,233</u>
COST OF SALES	2,712,401	1,785,419
COST OF RESEARCH CONTRACTS	370,217	747,936
SELLING, GENERAL AND ADMINISTRATIVE EXPENSES	713,660	843,776
AMORTIZATION OF RESEARCH AND DEVELOPMENT EXPENDITURES (Note 1 (d))	875,966	276,305
Total costs and expenses	<u>4,672,244</u>	<u>3,653,436</u>
OPERATING LOSS	<u>760,317</u>	<u>96,203</u>
OTHER INCOME CHARGES (CREDITS):		
Gain on disposal of fixed assets	—	(99,061)
Increase in provision for losses of non-consolidated subsidiaries (Note 1)	—	4,424
Loss on investments	32,417	32,907
Interest expense:		
Long-term debt	26,905	34,200
Other—net	7,006	—
Other	—	(14,287)
Net other income charges (credits)	<u>66,328</u>	<u>(41,817)</u>
LOSS BEFORE INCOME TAXES AND EXTRAORDINARY ITEMS	826,645	54,386
INCOME TAXES	—	4,500
LOSS BEFORE EXTRAORDINARY ITEMS (Note 1 (d))	<u>826,645</u>	<u>58,886</u>
EXTRAORDINARY ITEMS:		
Benefit of tax loss carryforward (Note 10)	90,000	4,500
Gain on sale of investment in non-associated company less income taxes of \$180,000 (Note 3)	212,934	—
Total extraordinary items	<u>302,934</u>	<u>4,500</u>
LOSS FOR THE YEAR (Note 1 (d))	523,711	54,386
DEFICIT (RETAINED EARNINGS) AT BEGINNING OF THE YEAR	38,878	(15,508)
DEFICIT AT END OF YEAR	<u>562,589</u>	<u>38,878</u>
EARNINGS PER SHARE (Notes 1 (d) and 13):		
Loss before extraordinary items	\$ 1.08	\$.08
Extraordinary items	(.40)	(.01)
Loss for the year	<u>.68</u>	<u>.07</u>

The accompanying notes are an integral part of the financial statements.

CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION
FOR THE YEAR ENDED DECEMBER 31, 1972
(with 1971 figures for comparison)

FUNDS PROVIDED:	1972	1971
From operations:		
Loss for the year before extraordinary items.....	\$ (826,645)	\$ (58,886)
Operating items not involving funds:		
Depreciation and amortization	1,003,871	377,763
Gain on disposals of fixed assets and investments (net)	—	(66,152)
Other	—	8,925
Funds provided from operations	<u>177,226</u>	<u>261,650</u>
Deferred income	426,690	—
Sale of investments, less income taxes	922,934	167,093
Disposal of fixed assets	—	99,148
Total funds provided	<u>1,526,850</u>	<u>527,891</u>
 FUNDS APPLIED:		
Purchase of warrants	10,500	—
Investments and advances	717,002	17,170
Research and development expenditures.....	66,077	33,386
Additions to fixed assets	883,723	133,248
Reduction in long-term debt	60,000	60,000
Additions to patents and trademarks	7,699	18,253
Total funds applied	<u>1,745,001</u>	<u>262,057</u>
(DECREASE) INCREASE IN WORKING CAPITAL.....	<u>\$ (218,151)</u>	<u>\$ 265,834</u>
 REPRESENTED BY:		
Increase in cash	\$ 121,315	1,564
(Decrease) increase in short-term deposit	(125,000)	125,000
Increase in receivables	174,292	71,375
Increase in other current assets	179,422	263,059
Increase in bank indebtedness.....	(315,326)	(97,340)
Increase in debt instalments	—	(10,500)
Increase in other current liabilities	(252,854)	(87,324)
(DECREASE) INCREASE IN WORKING CAPITAL.....	<u>\$ (218,151)</u>	<u>\$ 265,834</u>

The accompanying notes are an integral part of the financial statements.

BARRINGER RESEARCH INC. AND CONSOLIDATED SUBSIDIARIES
NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
DECEMBER 31, 1972

1. Summary of Significant Accounting Policies

(a) Principles of Consolidation

The accompanying consolidated financial statements comprise the accounts of the company and its wholly-owned subsidiary companies:

- Barringer Research Limited—a Canadian company ("Limited")
- Barringer Instruments Inc.—a Delaware corporation
- Barringer Geosurveys Pty. Limited—an Australian company which commenced operations in 1972

Inactive subsidiaries of Limited, none of which is significant, have not been consolidated. Investments in and advances to these subsidiaries are accounted for on the equity method.

(b) Principles of Translation

The accounts of foreign subsidiaries have been translated into United States dollars on the following bases:—

- (i) Income and expenses (other than depreciation and amortization)—at the average rate for the year.
- (ii) Depreciation and amortization—at historic rates applicable to the related asset account.
- (iii) Current assets and current liabilities at year end rates.
- (iv) Other balance sheet accounts—at historic rates.

The gain on translation of \$25,720 has been included in accounts payable.

(c) Depreciation Policy—See Note 5

(d) Amortization of Intangibles

Patents and trademarks are amortized over their related lives which range from five to seventeen years. Amortization amounted to \$3,654 in 1972 (1971—\$3,697).

Cost of company-sponsored research and development including applicable overheads, less Government grants and outside support, are written off over the estimated future period benefited by these outlays. Prior to 1968 the period of amortization was three years and from 1968 to 1971 it was five years.

Company-sponsored research was virtually discontinued in 1970 and in 1972, after a review of the projects, the remaining research expenditures were written-off as being of marginal future benefit.

The net cost incurred and amount for 1971 and 1972 are as follows:

	Net Cost	Amortization
1971	33,386	276,305
1972	66,077	875,966

The effect of this change in estimate on 1972 results was to increase loss before extraordinary items and loss for year by \$553,000 or 72¢ per share.

2. Inventories

The major categories of inventories are as follows:

	1972	1971
Finished goods	\$ 68,827	\$ 81,123
Work in progress	132,353	33,973
Materials and supplies	8,514	4,289
Contracts in progress	403,004	328,392
Total	<u>\$612,698</u>	<u>\$447,777</u>

Inventories other than contracts in progress are stated at the lower of average cost or net realizable value for finished goods and work in progress, and at the lower of average cost or replacement cost for materials and supplies. The percentage-of-completion method of accruing profit on contracts in progress is used, with anticipated losses being provided for in full.

3. Non-associated Companies

The investment in non-associated companies is represented by stock in closely-held companies, at lower of cost or market value.

In 1972, the Company sold shares in Combustion Equipment Associates, Inc. realizing a gain of \$392,934 which is included as an extraordinary item in the statement of loss and deficit.

4. Mining Exploration Ventures

In 1972, a subsidiary acquired shares in certain mining exploration companies in return for providing exploration services at cost. These shares have been recorded at an amount equal to the normal profit margin on such exploration services, with a corresponding credit to deferred income pending the realization of the investments.

In addition, the subsidiary made advances to one of the companies for which it is entitled to receive one share of the company for each \$1.30 advanced.

These ventures are summarized as follows:

(a) Shares recorded at normal profit margin:.....	\$426,690
Barringer Fiji Limited—40 shares (a 20% interest)	
—no quoted value	
Magenta Explorations Limited—1,000,000 shares	
(a 22% interest)—no quoted value	
Royex Mining Limited—131,667 unregistered shares	
—quoted value of registered shares at	
December 31, 1972, 35¢ per share	
(b) Advances	\$297,000
Magenta Explorations Limited (convertible	
into 230,000 shares)	
	<u>\$723,690</u>

Exploration of the mining properties of these companies is continuing, and no significant mineral discoveries have been made to date.

5. Fixed Assets

The major categories of fixed assets are as follows:

	1972	1971
Rental Equipment	\$ 173,237	\$173,237
Survey Equipment	621,867	184,841
Laboratory Equipment	675,359	198,316
Other	145,851	176,197
Total	<u>\$1,616,314</u>	<u>\$732,591</u>

Depreciation is provided on the straight-line basis over the estimated useful lives of the assets, principally four to ten years. Depreciation for the year amounted to \$124,251 (1971—\$97,761).

6. Bank Indebtedness

The bank indebtedness is secured by a general assignment of accounts receivable and by a floating charge debenture covering most of the consolidated assets.

7. Long-Term Debt

The convertible subordinated promissory notes are payable in semi-annual instalments of \$30,000. Interest is payable at fluctuating rates, the rate as at December 31, 1972 being 6% per annum. These notes are convertible on the basis (subject to adjustment under certain conditions) of \$20 principal amount of notes for one share of common stock.

8. Capital Stock

Shares of common stock reserved for issuance at December 31, 1972 were as follows:

For stock options:	
Options outstanding	113,150
Available for granting future options	11,850
For warrants	11,000
For conversion of promissory notes	18,250
Total	<u>154,250</u>

9. Stock Options and Warrants

(a) 1968 & 1970 Qualified Stock Option Plans

The Company has two qualified stock option plans each covering 30,000 shares of common stock of the Company.

Options may be granted to Directors and key employees of the Company or its subsidiaries at a price not less than the market value of the common stock at the time of the grant of the option. Each option is exercisable two years from the date of the grant, providing the optionee continues as a Director or remains in the employ of the Company or a subsidiary, and expires five years from the date of the grant. Information with respect to these stock option plans is summarized as follows:

	Shares	Amount
Options outstanding December 31, 1971 (\$2.00 to \$8.00 per share)	49,600	\$183,212
Changes during 1972:		
Option granted \$5.50 per share	8,250	45,375
Options cancelled	(9,700)	(45,525)
Options outstanding December 31, 1972 (\$2.00 to \$8.00 per share)	<u>48,150</u>	<u>\$183,062</u>

(b) Unqualified Stock Option Plan

In 1972 the Company adopted an unqualified stock option plan and options covering 55,000 shares were granted to six key employees at \$5.00 per share. These options are exercisable as follows:

After December 31, 1972—33,000 shares
After December 31, 1973—18,000 shares
After December 31, 1974— 4,000 shares

and expire either four or five years thereafter. The Company has first right of refusal to reacquire shares purchased under this option plan at a formula price equivalent to 75% of quoted value of the shares.

As at December 31, 1972, these options have not been exercised and are outstanding.

(c) Options Under Employment Agreements

Under two employment agreements dated October 1, 1972, the Company granted options, not under the option plans, to purchase an aggregate of 10,000 shares of common stock of the Company at a price of \$5.00 per share during the period from October 1, 1972 to September 30, 1977. As at December 31, 1972, these options have not been exercised, and are outstanding.

(d) Warrants

Warrants to purchase 25,000 shares of common stock of the Company were issued in 1968.

In 1972 warrants to purchase 14,000 shares were acquired for \$10,500 (see note 14) and cancelled. At December 31, 1972 warrants to purchase 11,000 shares at \$7.50 per share, exercisable to March 31, 1975 were outstanding.

10. Income Taxes

(a) United States Income Taxes

Tax losses of prior years of \$187,000 were used to reduce 1972 income taxes, giving rise to an extraordinary credit of \$90,000, in the statement of loss and deficit.

(b) Canadian Income Taxes

Income taxes otherwise payable by the Canadian subsidiary for 1968 through 1971, have been eliminated by the application of prior years' loss carry-forwards. As at December 31, 1972, loss carry-forwards of approximately \$840,000 were available for application against taxable income of future years. These losses expire \$510,000 in 1973, \$330,000 in 1974.

(c) Australian Income Taxes

The Australian subsidiary has tax losses of approximately \$45,000 expiring in 1979.

None of the subsidiaries have retained earnings.

11. Commitments and Contingent Liabilities

A subsidiary participated in a program under which a portion of the cost of research and development projects involving the development of two instruments for the sensing of air pollution was borne by the Canadian Government, subject to repayment, as explained below, to the extent that the instruments proved to be commercially successful. Contributions of approximately \$113,460 were received from the Government in prior years, and have been accounted for in accordance with the Company's regular practice with respect to research and development projects. Repayments are being made at a fixed rate per instrument sold or rented; the aggregate amount of such repayments is not to exceed the contributions received with interest thereon. A total of \$3,905 has been repaid to date. Such repayments are an element of cost of sales, and are deductible in computing taxable income.

An annual rental of \$16,500 Canadian is payable under a lease which expires January 14, 1986.

12. Pension Plans

In 1972, a subsidiary converted its insured pension plan for senior employees to a plan that provides retirement benefits for any employee, equal to 2% of annual salary for each year of employment under the plan. The aggregate cost of the plans was \$25,835 in 1972 (1971—\$3,579). Pension costs are funded, and there was no unfunded liability as at December 31, 1972.

13. Earnings Per Share

Earnings per share are based on the average number of shares outstanding, with shares issuable upon exercise of options and warrants during the year being included using the treasury stock method. Shares issuable upon conversion of the convertible promissory notes are not included since such conversion would have an anti-dilutive effect.

14. Paid-In Surplus

Balance December 31, 1971	\$1,832,112
Less: Cost of warrants acquired (note 10(e)) ..	10,500
Balance December 31, 1972	<u>\$1,821,612</u>

OPINION OF INDEPENDENT CHARTERED ACCOUNTANTS

To the Directors and Stockholders of
Barringer Research Inc.:

We have examined the consolidated balance sheet of Barringer Research Inc. and consolidated subsidiaries as at December 31, 1972 and the related consolidated statements of loss and deficit 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 of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We did not examine the financial statements of Barringer Geosurveys Pty. Limited (see Note 1a) but we were furnished with the report of other accountants on their examination of the statements of that subsidiary for the year ended December 31, 1972. Our opinion expressed below insofar as it relates to the accounts included for Barringer Geosurveys Pty. Limited is based solely upon such report.

In our opinion, subject to the realization of the advances of \$297,000 referred to in Note 4, the consolidated financial statements present fairly the financial position of the Companies as at December 31, 1972 and the results of their operations and the changes in their 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
March 28, 1973

DELOITTE, HASKINS & SELLS
Auditors

