

**Barringer
Research Inc.
and Subsidiary**

**ANNUAL REPORT
1974**

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OFFICERS:

Dr. Anthony R. Barringer, President
Dr. D. Richard Clews, Executive Vice President
Dr. Michael D. Silvester, Vice President
Brandon W. Sweitzer, Vice President
David A. Whiteman, Vice President
Robert J. Armstrong, Secretary
Kenneth H. Dalton, Controller

DIRECTORS:

Robert J. Armstrong
Dr. Anthony R. Barringer
Daniel R. Bereskin
Dr. D. Richard Clews
Sholly Kagan
Denis J.C. Macourt
Brandon W. Sweitzer
Roger C. Wilson

TRANSFER AGENT:

Chemical Bank, 20 Pine Street,
New York, New York 10015

AUDITORS:

Coopers & Lybrand,
Chartered Accountants,
145 King Street West,
Toronto, Ontario, Canada M5H 1V8

CORPORATE COUNSEL:

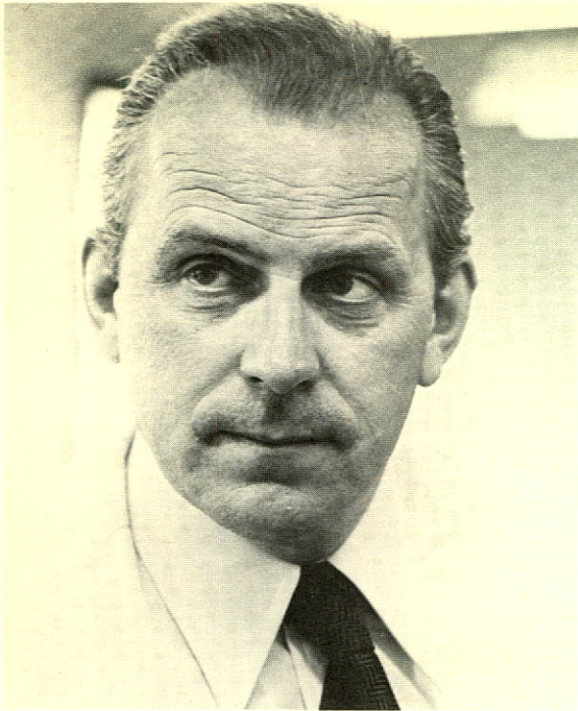
Blackwell, Law, Treadgold & Armstrong,
Suite 1501, 110 Yonge Street,
Toronto, Ontario, Canada M5C 1V2
Satterlee & Stephens,
277 Park Avenue,
New York, New York 10017

CORPORATE OFFICES:

Barringer Research,
304 Carlingview Drive,
Metropolitan Toronto, REXDALE, Ontario,
Canada M9W 5G2
Phone: (416) 677-2491
Cable: Baresearch, Toronto
Telex: 06-968743

TRADEMARKS

INPUT, COSPEC, E-PHASE,
RADIOPHASE, AIRTRACE, COTRAN
are trademarks of Barringer
Research Limited



A. R. Barringer

Dear Shareholder:

A successful year for an applied science and technology company such as Barringer Research brings both technical progress and financial gain. I am pleased to report that in 1974 Barringer made major scientific advances and showed much improved financial results.

This year, besides the usual reporting of financial results we are providing Shareholders and other interested parties with Barringer's annual report to the Securities and Exchange Commission (Form 10-K). It is contained at the end of this Annual Report in a separate section following the normal audited financial statements.

In brief, 1974 sales increased 13 percent over 1973 levels — from \$3.36 million to \$3.81 million. More importantly, profits on operations were \$290 thousand. This compares with 1973 and 1972 in which losses of \$408 thousand and \$760 thousand respectively were recorded. These loss years reflected in substantial measure the write-off of the heavy amount of initial R & D work incurred by Barringer on the Barringer AIRTRACE airborne mineral exploration system. Profits on

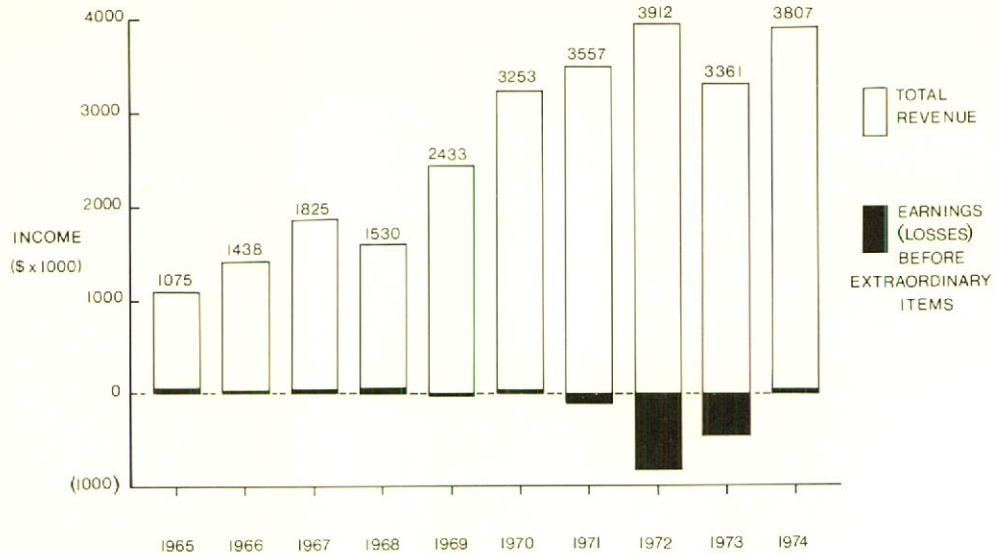
1974 operations are recorded after full expensing of all internally funded R & D.

Results after extraordinary items in 1974 likewise turned around substantially compared with the losses incurred in 1973 and 1972. 1974's profit of \$51 thousand compares with losses of \$460 thousand and \$524 thousand in the previous two years.

In many respects, 1974 was an important year for the company and Barringer enters 1975 operationally and financially stronger than before. A firm backlog of contracts approximating \$2.2 million exists for 1975 operations and most of this backlog is expected to be completed during 1975. This compares with a similar figure of \$3.1 million for 1974. This backlog is significant given the North American and worldwide climate of economic uncertainty and the special difficulties facing the mineral exploration industry for which Barringer principally supplies its advanced technology and systems.

In the rest of this Chairman's letter I would like to recapitulate our fundamental philosophy and outline some of 1974's achievements.

BARRINGER RESEARCH INC. — CONSOLIDATED 10 Year Summary of Revenue and Earnings



| (\$ x 1000) | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 |
|-------------------------------------|------|------|------|------|------|------|------|-------|-------|------|
| TOTAL REVENUE | 1075 | 1438 | 1825 | 1530 | 2433 | 3253 | 3557 | 3912 | 3361 | 3807 |
| EARNINGS BEFORE EXTRAORDINARY ITEMS | 31 | 24 | 49 | 46 | (4) | 7 | (59) | (827) | (486) | 31 |
| EARNINGS AFTER EXTRAORDINARY ITEMS | 31 | 24 | 86 | 75 | 35 | 54 | (54) | (524) | (460) | 51 |



Minsearch Surveys' AIRTRACE aircraft and mobile laboratory

Philosophy and Objectives

Change and the unexpected are the only constants in research and development of sophisticated technology and techniques. Hoped-for innovative contributions to the advance of knowledge, excitement and – to be sure – temporary disappointment are always present. Since Barringer's formation some 15 years ago, every effort has been made to strike a balance between maximizing commercial benefits from new discoveries and minimizing problems that the unexpected often brings.

Barringer's corporate strength is the successful research, development and patenting of proprietary systems and techniques that can be applied to the earth sciences – particularly to mineral exploration. Generally, these Barringer systems are aimed at airborne remote-sensing geophysical and geochemical exploration. They are backed by specialized expertise in the application not only of the systems themselves but also more conventional exploration techniques – geology, geochemistry, geophysics.

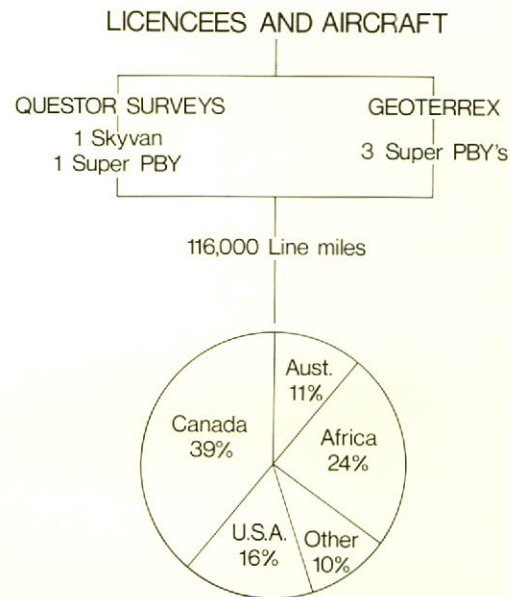
Barringer's objective is to use these strengths in advanced exploration systems to find commercial orebodies. The Company has sometimes put its capabilities to work on its own account; but most often has worked for others, either on a joint venture or fully-funded basis. The goal has always been to obtain some form of economic benefit from exploration for and discovery of commercially viable orebodies.

Economic participation to-date has come in two ways. First and immediately, it comes through royalty and fee payments for use of Barringer's patented and proprietary equipment. The Barringer INPUT system is the most notable example. Second, there are cases of direct participation in actual field exploration programs that have earned Barringer equity interests "in the ground". Barringer's role in exploration programs in the islands of Fiji (with Australian Anglo American and American Metal Climax Inc.) and in a Canadian joint venture program (with TRW Systems Inc.) have been the major instances of this kind of participation.

There is a third form of economic participation in which Barringer engages. During the past

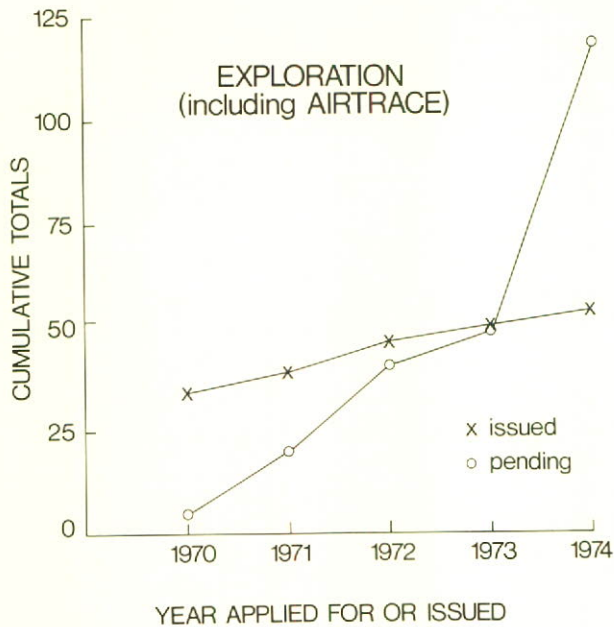
two years, as reported in 1973's Annual Report and Shareholder communications during the year, the Company has established two major joint venture companies – Minsearch Surveys Limited (Minsearch) in Toronto and Barringer Surveys Limited (BSL) in Johannesburg. Both companies are licensed to use the patented Barringer AIRTRACE system in the same way that Barringer's two licensees, Questor Surveys Limited and Geotrex Limited have since 1966 operated the Barringer INPUT system. A new element with the two new joint venture companies is that Barringer has an ownership stake in each – 50 percent in the case of Minsearch and 49 percent in the case of BSL. The major research effort that has gone into AIRTRACE over the past three years will hopefully begin to be realized in 1975 in the first commercial applications of the system with these joint venture companies. Arrangements with Minsearch and BSL have been structured to ensure that Barringer receives a royalty payment from AIRTRACE operations. To the extent possible, both companies expect to seek some equity participation in any commercial deposits found by clients using the specialized AIRTRACE contracting services of Minsearch and BSL.

1974 INPUT OPERATIONS



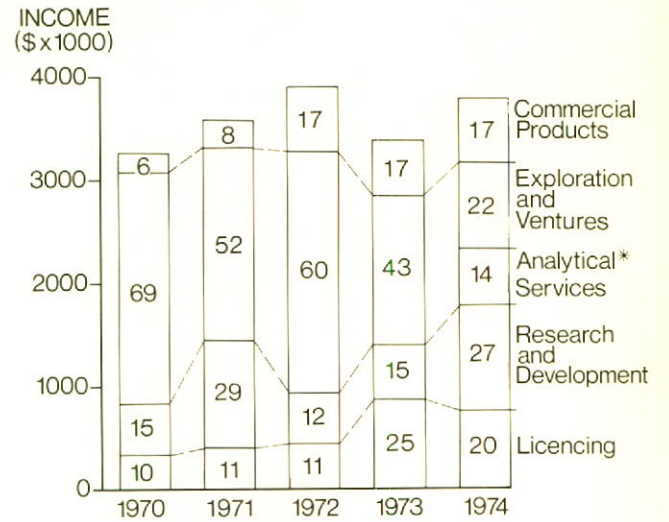
ACTIVE BARRINGER PATENTS

as at
31 December, 1974

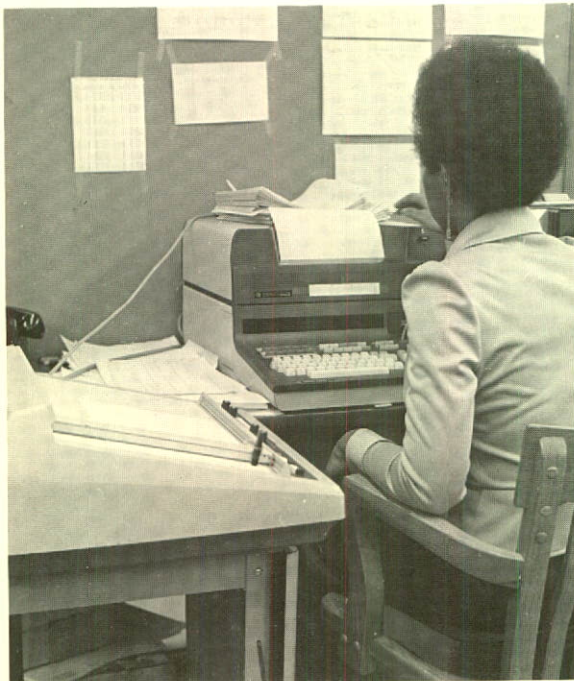


REVENUE SOURCE BY PROGRAM

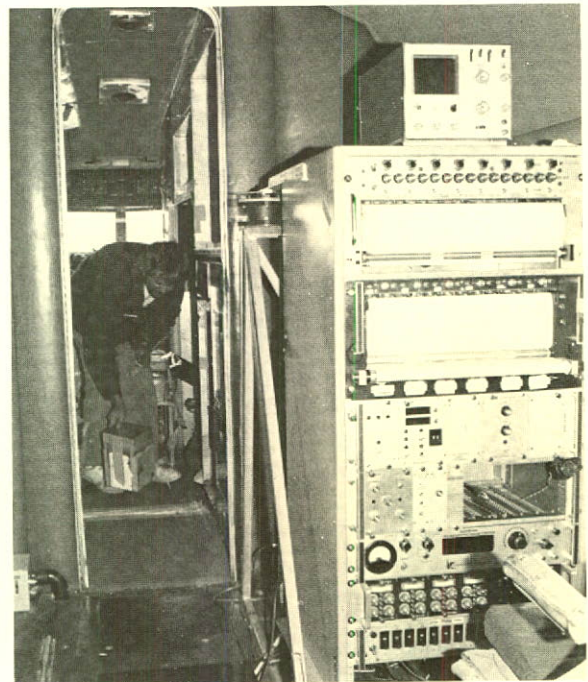
(Indicated in percentage of annual income)



* Prior to 1974 figures for analytical services were combined with exploration and ventures.



X-Y plotter with mini-computer graphically presents AIRTRACE data



Interior of AIRTRACE aircraft

The rationale for these joint companies is simple enough. Barringer has provided the initial ideas and the strength of its patents and proprietary positions. To this has been added the financial and marketing strength of two major mining organizations — the Anglo American Group and Gold Fields of South Africa. The Anglo Group partners have assumed the further financial risks of developing and operating AIRTRACE after Barringer itself carried the weight of the initial research and development effort. Gold Fields will also carry a financial risk in initial operations. All parties hope to share in the rewards when AIRTRACE becomes operational.

Besides efforts spent with these new joint companies, the Company has continued its participation in an exploration program in the Namosi Area of Fiji, and has maintained a level of activity in the Barringer/TRW joint venture areas. The Namosi drilling program is proceeding as planned. However, the depressed state of the exploration industry in Canada has caused Barringer to reassess its interests and investments in this Canadian exploration joint venture — Magenta Explorations Limited (Magenta). An initial step is being taken this year, and is reflected in the financial statements, to write down part of the Magenta investment. At the present time there is a reduced level of interest on the part of major and medium-sized mining companies in funding exploration programs in these Canadian areas. The write-off of approximately \$211 thousand represents about 60 percent of the asset value previously assigned Magenta.

The Company has taken major internal organizational steps over the past year. Through its restructured Analytical Chemistry and Biology Division the Company will continue to expand its position in analytical chemistry and microbiological capabilities not only to support its exploration-related efforts directly, but also in related analytical applications to environmental and pollution monitoring. There are several fields of chemical and biological analysis that Barringer is capable of entering. Each will continuously be assessed not only for their scientific merit but also in terms of their economic return and contribution to the Company's profitability.

In 1974 Barringer reorganized its Commercial Products Division that manufactures and markets

ground geophysical instrumentation systems. A series of developments of new magnetometers was concluded and they will be marketed in 1975. We plan to aggressively strengthen and hold our market position in this field.

Over the years, Barringer instruments have also been developed for the environmental and pollution monitoring market; and the Company from time to time has put great stress in this area. The result has been the Barringer-patented COSPEC remote sensing spectrometer for SO₂ and NO₂ and the Company's highly successful nuclear process control heavy water monitor.

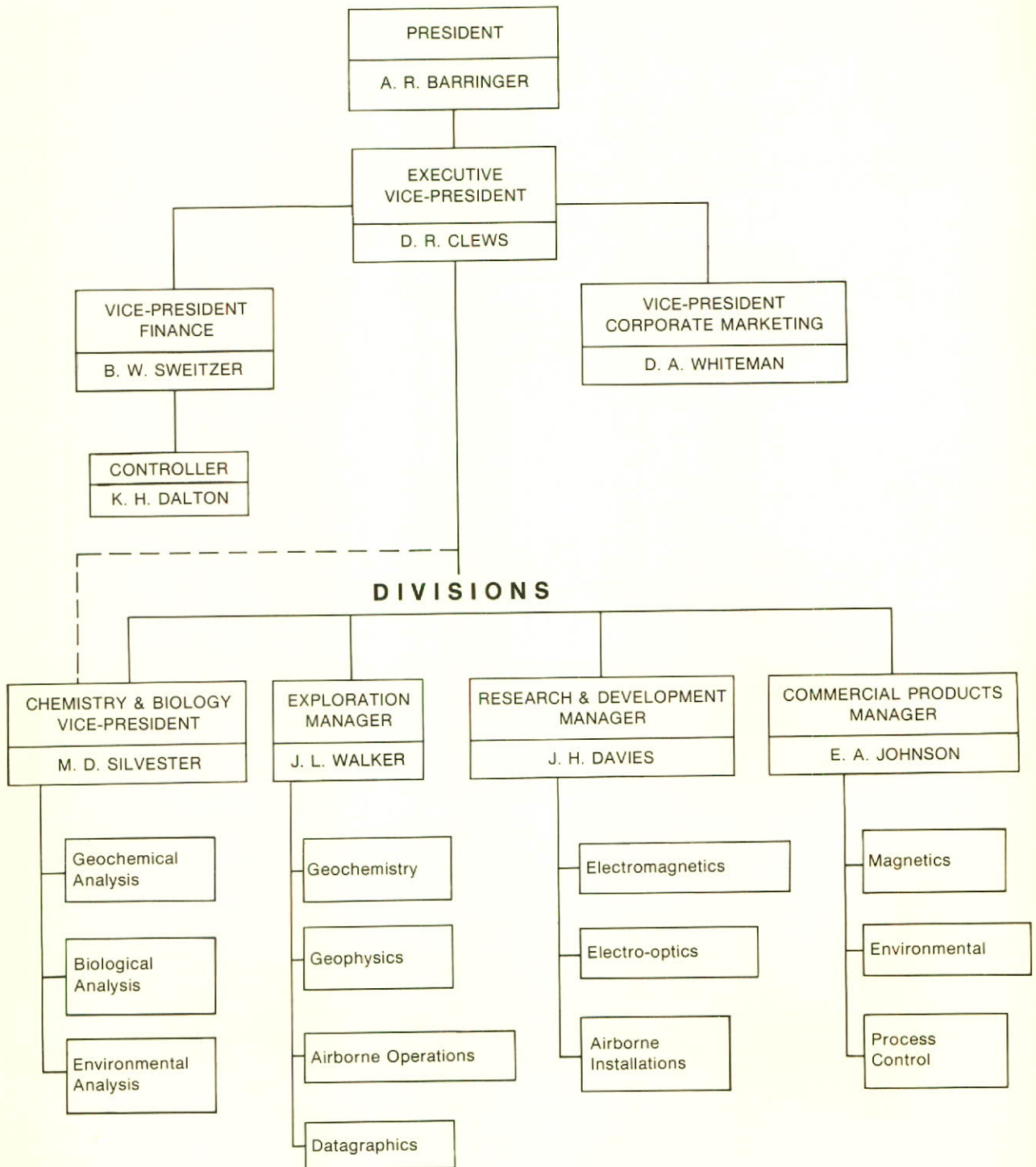
Barringer's organization chart shown on the following page includes the four principal operating divisions: Research and Development, Exploration, Analytical Chemistry and Biology, and Commercial Products. In addition, there is a fifth "operating" unit — Licensing and Royalty. All these areas and the people within them contribute importantly to the overall corporate objectives.

Research and Development

Barringer's Research and Development group includes a staff of professional scientists and engineers — six at doctoral or post-doctoral level — and supporting technicians and administrative staff. The group is especially competent and experienced in the fields of electro-optics, electromagnetics, magnetics and atmospheric physics. The Company's R & D policy is to undertake projects and programs that can be translated into patented or proprietary commercial products and systems within Barringer's field of earth science and exploration techniques.

It is a tribute to these people and many key members of other divisions that in 1974 the Company received the IR 100 Award, Barringer's fourth since 1969. This international award, made by a panel of distinguished experts sponsored by Industrial Research Magazine, recognizes each of one hundred inventions judged to be the most significant new products of the year. The 1974 award was received for the AIRTRACE system. In prior years the Barringer RADIO-PHASE exploration system, and both the Company's correlation spectrometer (COSPEC) and

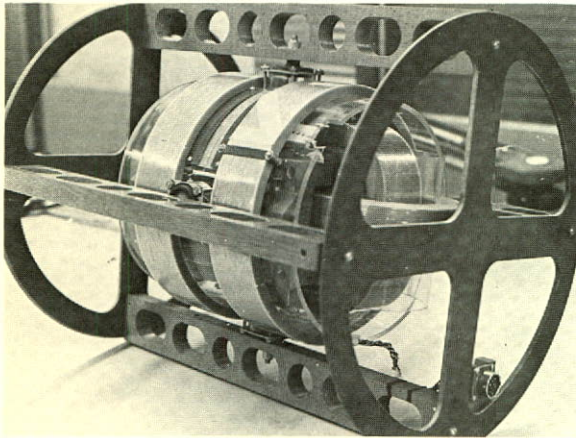
BARRINGER RESEARCH LIMITED
CORPORATE ORGANIZATION



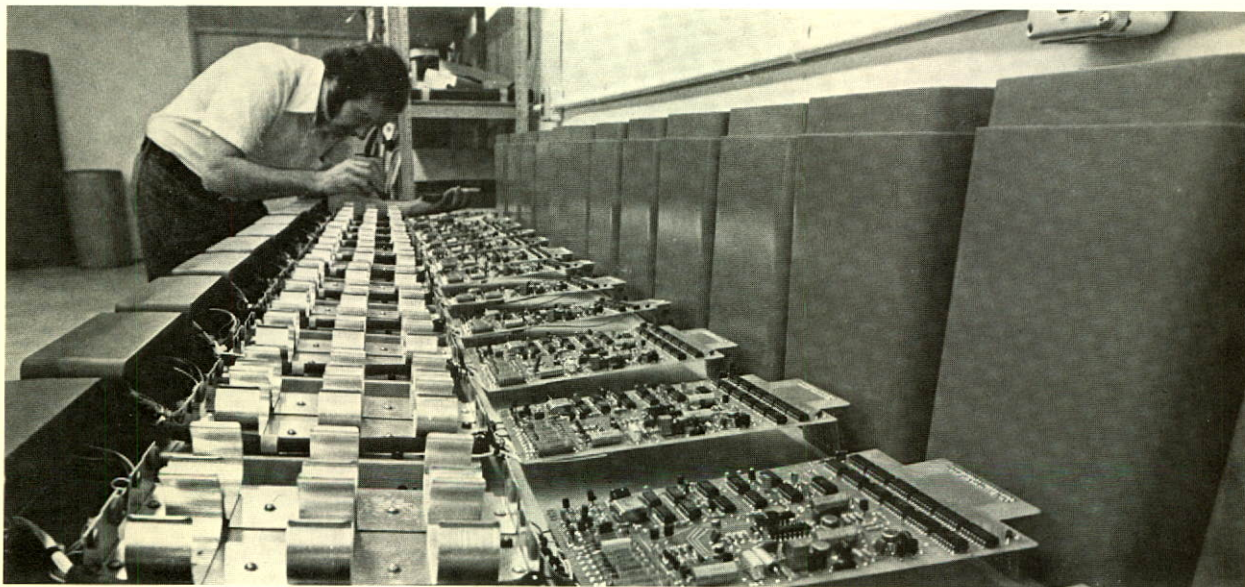


gas filter cell spectrometer that are used for environmental monitoring, have also received IR 100 Awards.

A company of Barringer's size needs substantial external support for advanced R & D work. Currently much of the Company's R & D work is sponsored by the joint venture partners in Minsearch and BSL, mentioned previously. But another important partner is the Canadian Government. In the past year Canadian Government grant support assisted in funding key members of Barringer's R & D staff, and in addition aided development of a new magnetometer line. This funding was received from the National Research Council of Canada and the Department of Industry, Trade and Commerce's Program for Advancement of Industrial Technology (PAIT). In addition, Barringer has worked closely with both the United States and Canadian Governments on contract R & D programs in specialized areas. In 1974 and continuing into 1975, the Company will be engaged in separate contracts with TRW Systems Inc. and General Electric Space Science Laboratories on development of remote sensing optical devices for earth observations from orbiting spacecraft. Apart from meeting the contractor's objectives, Barringer derives substantial indirect benefit in strengthening its capabilities and in generation of new ideas for the Company's primary thrust in the area of airborne remote sensing exploration instrumentation.



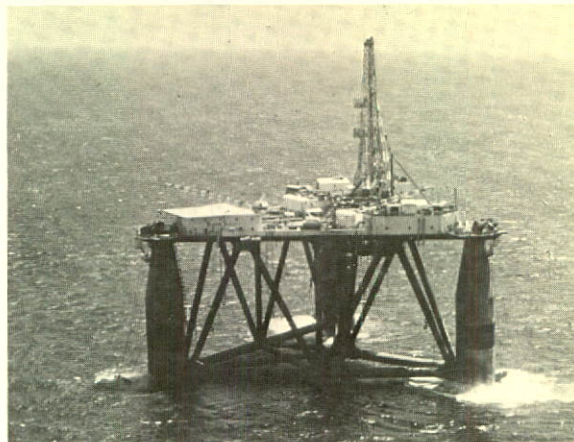
Electromagnetic sensor development



Production of proton mini-magnetometers



AIRTRACE mineral survey in Arizona



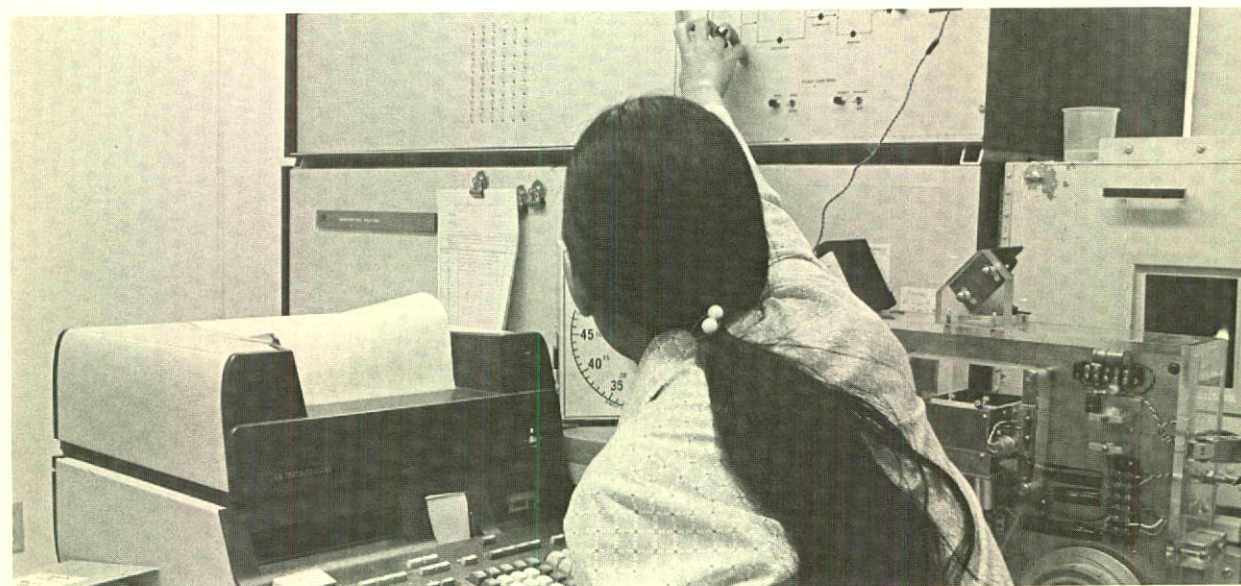
Offshore oil test surveys are flown with AIRTRACE



Collecting ground data for airborne comparison



Microbiology laboratory



Simultaneous analysis of 25 elements displayed on printer

Exploration

Barringer approaches exploration from a special angle — provision of specialized services and techniques to the exploration industry at large. In the past, Barringer geologists, geochemists, and geophysicists have conceived and managed major exploration programs, and also have established and maintained individual consulting practices. More recently, less effort has been spent on joint venture programs and a great part of the exploration group's creativity and expertise has been directed toward the company-wide AIRTRACE program. In particular, Barringer's special geochemical expertise has been applied to many of the unique problems encountered in the AIRTRACE research.

Additionally, the Fijian joint exploration program (the Namosi Project) with Australian Anglo American Limited and American Metal Climax Inc. was rearranged in 1974. Barringer was compensated for its services in an agreement that will increase exploration work on properties held by Barringer Fiji Limited on the islands of Viti and Vanua Levu. Barringer in turn has received additional equity in the Namosi Project, bringing its share to 5 percent.

The Company's geochemistry group is planning to act as program manager of a large geochemical program in the Goias Province of Brazil that begins in mid-1975. This major Brazilian resource exploration effort will be funded jointly by the Brazilian Government and the Inter-American Development Bank.

The strong professional position held by Barringer in geochemistry contributed substantially to the geochemical soil sample analysis work performed in the Company's analytical chemical laboratories both in Toronto and in Whitehorse, Yukon Territory. The latter operates in the summer months during Northern Canada's exploration season.

Barringer's exploration group also executed sizeable contract flying surveys for sand, gravel and permafrost using the Company's E-PHASE system. This was the second successive season of E-PHASE flying done on a commercial basis, and Barringer hopes to encourage more use of this system in the future.

Analytical Chemistry and Biology Services

As noted previously, Barringer's Analytical Chemistry and Biology Services were established in 1974 as a separate operating division. This step was taken to enhance the Company's ability to expand and market its capabilities in analytical chemical and biological services and serve a wider range of clients.

Barringer's Analytical Chemistry and Biology staff consists of professionals — two at the doctoral level — who apply specialized knowledge and instrumentation developed from R & D contracts to analytical service work in the following areas: (i) geochemistry and geology; (ii) pollution control; (iii) medicine; (iv) industrial control; (v) agriculture and animal studies.

The laboratory performs multi-element chemical analysis on samples submitted by customers. Additionally, Barringer's staff undertake special R & D projects under contract to Government agencies and industrial clients. Clients for analytical services in 1974 included several major Canadian and international mining and exploration companies, together with many Canadian Provincial and Federal agencies.

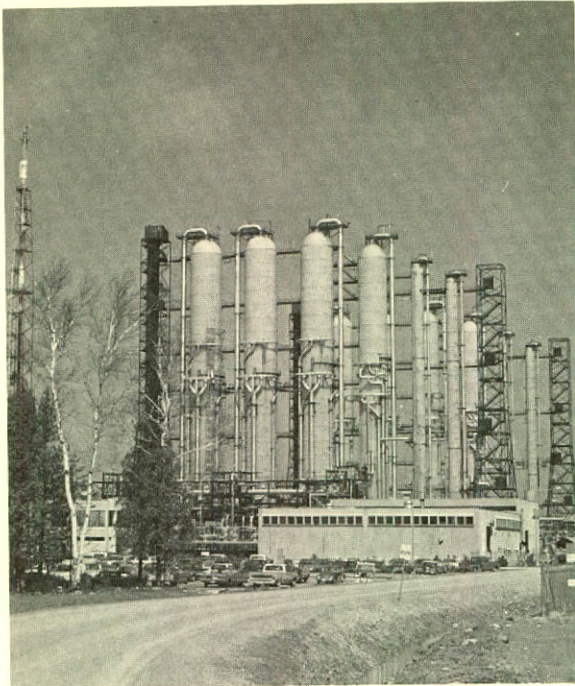
Barringer also provided substantial analytical research and development work for the AIRTRACE program on behalf of the Company's joint venture partners.

Much of the Division's work in 1974 was analysis of geochemical soil samples, and reflects the Company's overall commitment to services in this facet of exploration and the earth sciences. The amount of geochemical work done, and the overall growth in revenues from analytical services, has been achieved in spite of the severe reduction in 1974 of exploration expenditures in Canada.

During 1975 the Company plans to continue its expansion in the field of offering new high-volume and low cost analytical services performed with new instrumentation and techniques.

Commercial Products

Barringer has always produced and marketed small runs of specialized instruments and instru-



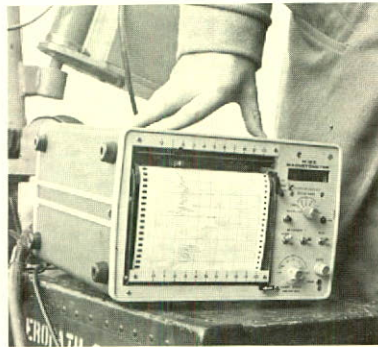
Bruce heavy water plant

Successful Mining Discoveries by INPUT

| | PERCENTAGE OF INPUT TO TOTAL E.M./MAGNETIC SURVEY LINE MILES FLOWN WORLDWIDE | COMMERCIAL OREBODIES ACKNOWLEDGED |
|------|---|--|
| 1968 | not known | Uchi Lake, Ontario, Can. |
| 1969 | 18 | Mattabi, Ontario, Can. |
| 1970 | 48 | Chibex, Quebec, Can. Lyon, Sturgeon Lake, Ontario, Can. Creek Zone, Sturgeon Lake, Ontario, Can. N.B.U. Sturgeon Lake, Ontario, Can. |
| 1971 | 41 | None |
| 1972 | 51 | Iso-Copperfields, Ontario/Quebec, Can. |
| 1973 | 34 | Freeport Mineral, Reed Lake, Manitoba, Can. Kennecott Ladysmith, U.S.A. |
| 1974 | 55 (estimated) | Patino Mines, Quebec, Can. Selco-Pickands Mather, R. Turgeon, Quebec, Can. Anglo-Vaal Prieska Annex Occurrence, South Africa |



COSPEC installation in aircraft



New marine recording magnetometer



*COSPEC measures SO₂ emissions
remotely*



Licencees INPUT-equipped aircraft

ment systems that have been outgrowths of the Company's R & D activities. Presently, the Commercial Product instrument lines include ground geophysical exploration instruments, the air pollution and environmental monitoring COSPEC, and nuclear process control heavy water monitors.

During 1974 in recognition of the Commercial Product Division's greater marketing strength, it was established as an autonomous division. Previously this group has been part of the R & D Division. In particular, sales of Barringer geophysical instruments increased substantially, and plans are underway for 1975 to expand this product line with newer and still more competitive instruments.

It is also noteworthy that the Company's position in the nuclear process control area was acknowledged by the industry as the Commercial Products Division obtained a commitment from a major international engineering firm for manufacture and supply during 1975 and 1976 of several heavy water monitor systems.

During the past year the Company continued to open new markets with the patented COSPEC instrument. In conjunction with Environmental Measurements Inc. (San Francisco) the first mobile laboratory for real-time processing of pollution data is being built for the Netherlands Institute of Social Health. COSPEC sales were also concluded in the United States, Australia, Austria, France, Japan and the People's Republic of China.

In 1975 Barringer hopes to initiate ventures with companies in the environmental pollution field and to make its strength available to this industry sector without detracting from its principal corporate emphasis on exploration technology, instruments and techniques.

Licensing

In a real and tangible sense licensing and royalty income flows have been Barringer's backbone and stabilizing factor over the years. Without these funds, it would not have been possible to sustain the technical, scientific and commercial risks that have been undertaken.

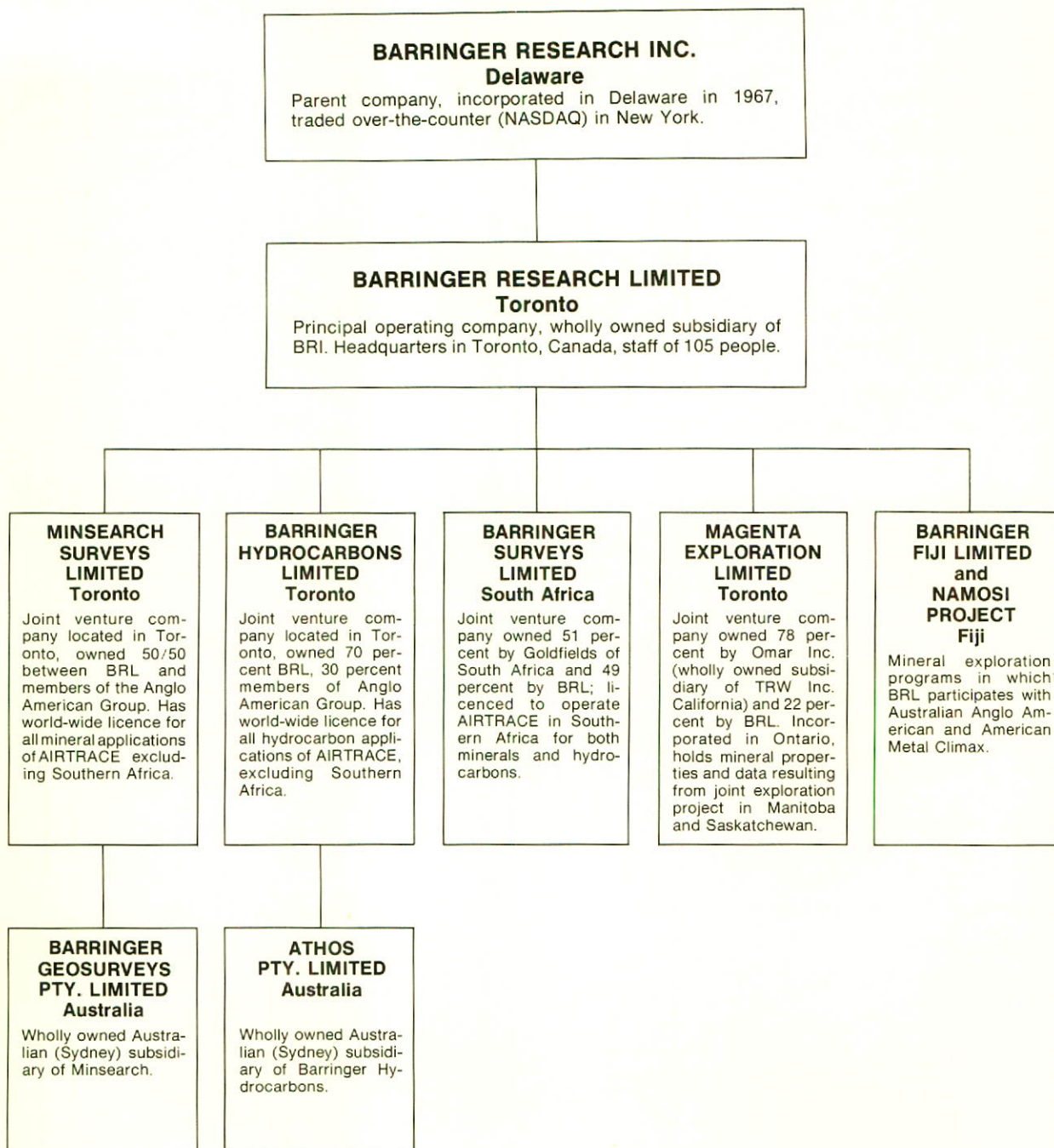
Throughout 1974, the Barringer INPUT system continued to maintain its position as the world's leading airborne electromagnetic prospecting system. According to data compiled by the Society of Exploration Geophysicists, the INPUT system flew more than half the total world dollar volume of surveys flown with airborne electromagnetic prospecting equipment. Most importantly the INPUT system was responsible in 1974 for discovery of another three commercial orebodies. Worldwide, 12 acknowledged orebodies have been discovered by INPUT. This year the 10th deposit in Canada since the system went into operation was announced. Although Barringer does not derive equity participations from INPUT discoveries, the system's continued success increases its utilization by the industry and the royalties to the company.

Further, the joint venture arrangements concluded with the Anglo American Corporation of Canada Limited, Hudson Bay Mining and Smelting Co., Limited, and Minerals and Resources Corporation Limited (all members of the Anglo American Group) provided Barringer with a substantial source of license income in 1974. This source will continue in 1975 and into 1976. Of course it is our hope that as soon as the joint venture companies become operational with the AIRTRACE and associated airborne systems that this will yield yet another stream of royalty income for Barringer. In this regard, it is well to comment further on the subsidiary and joint venture companies in which the Company is now engaged. (A schematic presentation of these joint ventures is on the following page).

Joint Venture Airborne Exploration Companies

As previously noted, Barringer is in partnership with the Anglo American Group in a Canadian-based company, Minsearch Surveys Limited, and with Gold Fields of South Africa, in the joint company, Barringer Surveys Limited. Barringer granted Minsearch a worldwide exclusive license for the commercial exploitation of AIRTRACE, except for areas covered by previous agreements, and will offer the Barringer AIRTRACE system to the mineral exploration industry as a whole on a worldwide basis. BSL has a similar license

THE BARRINGER GROUP



for mineral and hydrocarbon applications of AIRTRACE that is restricted to the territory of Southern Africa. During the past year, Minsearch operations were principally of R & D and test nature and extensive flying of the system and laboratory work continues. As part of the agreement establishing Minsearch, Barringer transferred to the new company the shares of its former Australian subsidiary company, Barringer Geosurveys Pty. Limited (BGS). Barringer's interest in BGS is now shared equally with its partners.

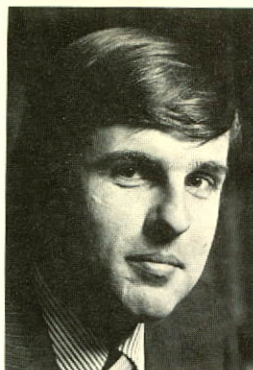
A second company was also formed with the Anglo Group companies and granted a license to use the AIRTRACE system for hydrocarbon and geothermal resource exploration. Barringer holds a 70 percent equity position in this company — Barringer Hydrocarbons Limited (BHL) — with the Anglo Group holding a 30 percent position. A portion of the Minsearch research and development program funding was devoted to the AIRTRACE hydrocarbon program in 1974 in return for the Anglo position in BHL.

Throughout the past year Barringer personnel continued their work outfitting a Trislander aircraft for BSL. BSL had no operations in 1974 as the aircraft was being outfitted in Toronto with the latest AIRTRACE and other airborne systems. In addition to the AIRTRACE work done during 1974, BSL had approved a program of special airborne EM development work tailored to the BSL aircraft. Barringer will perform this work in 1975.

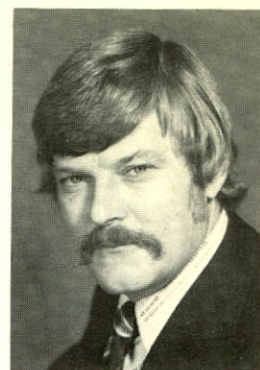
★ ★ ★ ★ ★

Two important appointments were made during the past year by the Barringer Board and Management. In recognition of their contributions to the Company, we were pleased to welcome Mr. Brandon W. Sweitzer, Vice President, Finance, to the Board; and to appoint Dr. Michael D. Silvester, head of the Company's Analytical Chemistry and Biology Division, to the position of Vice President.

Finally, it was most rewarding personally for me to continue as Visiting Professor at Imperial College's Royal School of Mines (London). The Company has for several years supported signifi-



B. W. Sweitzer



M. D. Silvester

cant research efforts at Imperial College, this year with added assistance from the Minsearch Joint venture. We hope that the relationship between Barringer and Imperial College will be as fruitful in the future as it has been in the past.

In summation, 1974 has been a particularly gratifying year. We enter 1975 in a stronger financial shape than in any prior year. And this has happened despite the difficult economic conditions with which all companies are now faced. Scientifically and technically we have continued to make increasing progress in all areas of the Company's endeavour. Organizationally and procedurally we have developed greater focus and tightened significantly the planning and control of our activities. We are confident these healthy trends will continue.

A handwritten signature in cursive script, appearing to read 'A R Barringer'.

A. R. Barringer

Barringer Research Inc. and Subsidiary

CONSOLIDATED BALANCE SHEET

As at December 31, 1974 and 1973

| | ASSETS | |
|--|------------------|------------------|
| | 1974 | 1973 |
| | \$ | \$ |
| CURRENT ASSETS | | |
| Cash | 28,284 | 42,453 |
| Accounts receivable – | | |
| Trade, less allowance for doubtful accounts, 1974 – \$28,377; 1973 – \$33,296 | 537,073 | 657,224 |
| Corporate joint ventures | 303,094 | 72,471 |
| Inventories | 503,997 | 716,084 |
| Deposits, advances and prepaid expenses | 32,512 | 65,609 |
| Income taxes recoverable | 10,000 | – |
| | <u>1,414,960</u> | <u>1,553,841</u> |
| Advances to associated company | 387,625 | – |
| Subsidiaries not consolidated | – | 9,938 |
| Investments and advances | 932,038 | 774,440 |
| | <u>1,319,663</u> | <u>784,378</u> |
| FIXED ASSETS | <u>418,935</u> | <u>676,738</u> |
| OTHER ASSETS – at cost, less amortization | | |
| Patents and trademarks | 158,735 | 149,804 |
| | <u>3,312,293</u> | <u>3,164,761</u> |

LIABILITIES

| | 1974 | 1973 |
|---|------------------|------------------|
| | \$ | \$ |
| CURRENT LIABILITIES | | |
| Bank indebtedness | 620,000 | 894,282 |
| Current portion of long-term debt | 60,000 | 60,000 |
| Accounts payable | 344,477 | 446,132 |
| Accrued liabilities | 168,509 | 183,127 |
| Income taxes | — | 18,000 |
| Short-term advances — | | |
| Associated company | 150,000 | — |
| Other | 167,362 | — |
| | <u>1,510,348</u> | <u>1,601,541</u> |
| DEFERRED INCOME | 709,833 | 464,190 |
| LONG-TERM DEBT — Convertible subordinated | | |
| promissory notes, less amount included in current liabilities | 185,000 | 245,000 |
| | <u>2,405,181</u> | <u>2,310,731</u> |

SHAREHOLDERS' EQUITY

| | | |
|---|------------------|------------------|
| COMMON STOCK | | |
| Authorized — | | |
| 2,000,000 shares of common stock of 1¢ par value each | | |
| Issued and fully paid — | | |
| 867,400 shares | 8,674 | 8,674 |
| PAID-IN SURPLUS | 1,876,143 | 1,874,288 |
| DEFICIT | (971,303) | (1,022,385) |
| | <u>913,514</u> | <u>860,577</u> |
| Less common stock in Treasury — at cost, | | |
| 88,400 shares (1973 — 90,400 shares) | 6,402 | 6,547 |
| | <u>907,112</u> | <u>854,030</u> |
| | <u>3,312,293</u> | <u>3,164,761</u> |

Barringer Research Inc. and Subsidiary

CONSOLIDATED STATEMENT OF EARNINGS (LOSS) AND DEFICIT

For the Years Ended December 31, 1974 and 1973

| | 1974 | 1973 |
|--|--------------------|--------------------|
| | \$ | \$ |
| REVENUE | <u>3,807,331</u> | <u>3,361,067</u> |
| COSTS AND EXPENSES | | |
| Cost of goods sold | 2,514,019 | 2,220,613 |
| General and administrative expenses | 918,166 | 1,059,163 |
| Research and development expenditures | <u>85,295</u> | <u>489,643</u> |
| | <u>3,517,480</u> | <u>3,769,419</u> |
| OPERATING INCOME (LOSS) | <u>289,851</u> | <u>(408,352)</u> |
| OTHER (INCOME) AND EXPENSES | | |
| Write down of advances | 211,487 | — |
| Loss on sale of shares in non-associated companies | 3,003 | 19,246 |
| (Gain) on sale of subsidiary company | (112,897) | — |
| Interest — | | |
| Long-term debt | 33,131 | 30,552 |
| Other — net | 95,187 | 48,900 |
| Other | <u>18,858</u> | <u>(10,254)</u> |
| | <u>248,769</u> | <u>88,444</u> |
| EARNINGS (LOSS) BEFORE INCOME TAXES AND EXTRAORDINARY ITEMS | 41,082 | (496,796) |
| INCOME TAX PROVISION, LESS RECOVERY (RECOVERED) | <u>10,000</u> | <u>(11,000)</u> |
| EARNINGS (LOSS) BEFORE EXTRAORDINARY ITEMS | <u>31,082</u> | <u>(485,796)</u> |
| EXTRAORDINARY ITEMS | | |
| Benefit of tax loss carry forward | 20,000 | — |
| Gain on sale of investment in non-associated company, less income taxes | <u>—</u> | <u>26,000</u> |
| | <u>20,000</u> | <u>26,000</u> |
| NET EARNINGS (LOSS) FOR THE YEAR | 51,082 | (459,796) |
| DEFICIT — BEGINNING OF YEAR | <u>(1,022,385)</u> | <u>(562,589)</u> |
| DEFICIT — END OF YEAR | <u>(971,303)</u> | <u>(1,022,385)</u> |
| AVERAGE NUMBER OF SHARES OUTSTANDING | <u>781,087</u> | <u>772,624</u> |
| EARNINGS (LOSS) PER SHARE | | |
| Income (loss) before extraordinary items | \$0.04 | (\$0.62) |
| Extraordinary items | <u>\$0.02</u> | <u>\$0.03</u> |
| Net earnings (loss) for the year | <u>\$0.06</u> | <u>(\$0.59)</u> |

Barringer Research Inc. and Subsidiary

CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION

For the Years Ended December 31, 1974 and 1973

| | 1974 | 1973 |
|--|-----------------|------------------|
| | \$ | \$ |
| FUNDS PROVIDED | | |
| From operations – | | |
| Net earnings (loss) for the year | 51,082 | (485,796) |
| Items not involving funds – | | |
| Depreciation and amortization | 155,267 | 181,354 |
| Loss on investments and other assets | 26,858 | 19,246 |
| Write down of advances | 211,487 | – |
| Gain on sale of subsidiary company less operating losses in current period | (74,063) | – |
| | <u>370,631</u> | <u>(285,196)</u> |
| Deferred income | 319,353 | 37,500 |
| Sale of investments, less income taxes | – | 26,000 |
| Issue of shares of common stock | – | 52,800 |
| Disposals of fixed assets – net | – | 219,154 |
| Reclassification of a non-current asset to current | – | 18,989 |
| | <u>689,984</u> | <u>69,247</u> |
| FUNDS APPLIED | | |
| Investments and advances | 189,771 | 52,517 |
| Reduction in long-term debt | 60,000 | 60,000 |
| Additions to patents and trademarks | 26,755 | 70,750 |
| Purchases of fixed assets – net | 37,581 | – |
| Reclassification of current assets to non-current | 379,158 | – |
| Decrease in working capital resulting from sale of subsidiary | 44,407 | – |
| | <u>737,672</u> | <u>183,267</u> |
| DECREASE IN WORKING CAPITAL | <u>47,688</u> | <u>114,020</u> |
| CHANGES IN COMPONENTS OF WORKING CAPITAL | | |
| WORKING CAPITAL (DEFICIENCY) – BEGINNING OF YEAR | <u>(47,700)</u> | <u>66,320</u> |
| Decrease in cash | 14,169 | 108,315 |
| Decrease (increase) in inventories | 212,087 | (103,386) |
| Decrease (increase) in receivables | (110,472) | 9,765 |
| Decrease (increase) in other current assets | 23,097 | (20,938) |
| (Decrease) increase in bank indebtedness | (274,282) | 481,616 |
| (Decrease) increase in other current liabilities | 183,089 | (361,352) |
| | <u>47,688</u> | <u>114,020</u> |
| DECREASE IN WORKING CAPITAL | <u>47,688</u> | <u>114,020</u> |
| WORKING CAPITAL DEFICIENCY – END OF YEAR | <u>95,388</u> | <u>47,700</u> |

This year Barringer is including in its annual report a copy of the S.E.C. Form 10-K. This form, filed each year by all publicly owned companies, contains more detailed information than is given in the typical annual report. Our intention in presenting it here is to give all present and prospective shareholders a comprehensive picture of Barringer Research's business and financial condition.

This Form 10-K has not been approved or disapproved by the Securities and Exchange Commission nor has the Commission passed on the accuracy or adequacy of the data included herein.

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Form 10-K

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15 (D)
OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 1974

Commission File No. 0-3207

Barringer Research Inc.

(Exact name of registrant as specified in its charter)

Delaware

*(State or other jurisdiction of
incorporation or organization)*

90-600-4033

*(IRS Employer Identification
Number)*

Barringer Research Limited

(Exact name of registrant as specified in its charter)

Ontario, Canada

*(State or other jurisdiction of
incorporation or organization)*

—

*(IRS Employer Identification
Number)*

**304 Carlingview Drive,
Metropolitan Toronto,
Rexdale, Ontario, Canada**

(Address of principal executive offices)

M9W 4G2

(Postal Code)

Registrant's telephone number, include area code: (416) 677-2491

Securities registered pursuant to Section 12 (b) of the Act:

NONE

Securities registered pursuant to Section 12 (g) of the Act:

Common Stock, \$.01 par value, Barringer Research Inc.

(Title of Class)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes No

BARRINGER RESEARCH INC.

FORM 10-K

PART I

ITEM 1. BUSINESS

Item 1. (a) PRINCIPAL PRODUCTS AND SERVICES

Barringer Research Inc., a Delaware Corporation (the "Registrant"), through its wholly-owned subsidiary Barringer Research Limited, an Ontario Corporation ("BRL"), engages in five principal activities: (1) Research and Development Services; (2) Natural Resource Exploration Ventures and Services; (3) Commercial Products: Instrument Manufacture; (4) Analytical Chemistry and Biology Services; (5) Licensing of Patented Proprietary Products.

(1) RESEARCH AND DEVELOPMENT SERVICES

BRL's Research and Development Division comprises a staff of professional scientists and engineers (six at the doctoral or post-doctoral level) that undertakes R & D work for industrial and Government agency clients in the following disciplines: (i) electro-optics; (ii) electro-magnetics; (iii) magnetics; and (iv) atmospheric physics.

BRL's R & D policy is to undertake projects and programs whose results can be transformed into patented or proprietary commercial products and systems. Generally such projects include design engineering and construction of prototype instruments and systems.

Due to BRL's patent position for significant instruments and instrument systems, and the know-how obtained from previous R & D work associated with these patents, a large portion of the Company's 1974 R & D work was carried out pursuant to agreements funded by major mining and mining-finance companies with which BRL is also partner in joint-ventures. These systems are licensed for commercial operations to the joint companies. (See Sections (1) (a) and (5).)

Other clients for R & D projects underway in 1974 included several private and government organizations, among them:

- General Electric Space Science Laboratories (Philadelphia)
- National Aeronautics and Space Administration (NASA)
- Texaco Exploration Ltd. (Calgary)
- Atomic Energy of Canada Limited (Canada)
- Department of Energy, Mines and Resources (Canada)
- National Research Council (Canada)
- Department of the Environment (Canada)
- Department of Industry, Trade and Commerce (Canada)
- Geophysical Engineering Limited (Toronto)

R & D revenues amounted to \$1,079,000 in 1974 (\$633,000 in 1973).

R & D Products and Techniques

From its R & D projects BRL has developed instruments, instrument systems and techniques in the fields of: (a) airborne exploration, (b) ground exploration and (c) environmental monitoring and process control.

(a) Airborne Exploration Systems

- (i) *INPUT*: BRL began as a company with the scientific and commercial success of an R & D effort, the airborne electromagnetic INduced PULse Transient technique (INPUT). This commercially licensed system now provides BRL with a substantial annual royalty and rental income from its survey applications that are flown under license to Geoterrex Limited (Ottawa) and Questor Surveys Limited (Toronto). (See Section 5).
- (ii) *AIRTRACE*: In 1972 BRL began active field testing of a new patented and proprietary geochemical exploration system – AIRTRACE. In 1973 this program continued, and license agreements for commercial use of the system were concluded with Gold Fields of South Africa in certain limited geographic areas. In 1974 BRL formed a joint company, Minsearch Surveys Limited (Minsearch), licensed by BRL to exploit AIRTRACE commercially on a worldwide basis, subject to prior-existing agreements (See Section 2). The AIRTRACE system received a 1974 IR 100 Award as one of the year's one hundred most significant new industrial inventions. This was BRL's fourth IR 100 Award since 1969.
- (iii) *RADIOPHASE* and *E-PHASE*: BRL's proprietary airborne exploration techniques RADIOPHASE and E-PHASE were also developed from R & D projects. During 1974 BRL flew commercial surveys of the E-PHASE system, performing resistivity surveys for locating sand, gravel and permafrost under contract to Canadian provincial government agencies and a private engineering company.
- (iv) *Helicopter EM Systems*: Throughout 1974 BRL continued its development work on helicopter-borne electro-magnetic systems, concentrating on new console technology for a major Canadian mining company.

(b) Ground Exploration Instruments

BRL in 1974 continued an active development program in magnetometry under sponsorship of the Canadian Department of Industry, Trade and Commerce's Program for Advancement of Industrial Technology (PAIT). BRL plans to enter the ground, ocean and airborne magnetometer market with a new magnetometer as a follow up to the 1973 introduction of its GM-122 portable proton magnetometer. (See Section 3).

(c) Environmental Monitoring/Process Control

BRL's R & D in these fields has produced five techniques and products that are now either manufactured and sold by BRL, or under license from BRL:

- (i) *Electro-optical techniques for air pollution monitoring*, including the SO₂/NO₂ correlation spectrometers designated COSPEC II and III and a higher sensitivity unit, the single gas COSPEC IV. (See Section 3).
- (ii) *The Barringer gas filter cell correlation spectrometer*, which is capable of remote detection of trace gases in the atmosphere. BRL received a 1973 IR 100 Award for this instrument.
- (iii) *Electro-optical techniques for heavy water process monitoring and control* in the CANDU-type nuclear reactors of the Atomic Energy Corporation of Canada. In 1974 BRL enlarged the capability of this technique in the area of trace leak detection to monitoring of nitric acid in water.
- (iv) *The Barringer-patented correlation interferometer* for the remote sensing of trace gases, currently applied under subcontract to General Electric Space Science Laboratories (Philadelphia) to NASA's Carbon Monoxide Pollution Experiment (COPE) at Langley Research Center.
- (v) *The Barringer Stack Monitor* now manufactured and sold under license by Combustion Equipment Associates (New York).

(2) NATURAL RESOURCE EXPLORATION VENTURES AND SERVICES

BRL's exploration policy has been to undertake programs funded by joint venture partners for minerals and hydrocarbons that utilize the company's most advanced airborne and ground systems, techniques and expertise.

In past years BRL has combined its professional expertise in geology, geochemistry and geophysics, backed with laboratory competence in analytical chemistry, in the management of large and small mineral exploration programs. During 1974 no such programs were undertaken, but BRL provided exploration consulting services from its staff of professional geologists, geochemists and geophysicists. In addition, this staff supported specialized R & D in connection with the AIRTRACE program.

BRL intends to increase its corporate emphasis on exploration consulting, and further will be program manager of a large geochemical project in the Goias Province of Brazil under a major resource exploration program funded by the Inter-American Development Bank and the Brazilian Government.

BRL in 1974 also undertook airborne survey operations to locate sand, gravel and permafrost. These contract surveys, performed for Canadian Provincial government agencies and a private engineering company, utilized the BRL-patented E-PHASE resistivity system. This was the second year of commercial operation for the E-PHASE system. Results from 1973 surveys in Canada confirmed that it had been successful in locating a commercial grade gravel deposit of greater than 1 million tons.

Total revenues obtained from resource exploration consulting, field operations and R & D contract activities amounted to \$734,000 in 1974 (\$1,092,000 in 1973).

No new joint venture field exploration programs were undertaken in 1974. Activities continued, however, on geographic areas covered by the field programs managed by BRL in the years 1968 to 1972. The two principal areas were in the Fiji Islands and in Central Canada.

Fiji Program: BRL is currently involved in mineral exploration programs in the Fiji Islands through two vehicles: (1) Barringer Fiji Limited and (2) a joint venture with Australian Anglo American Company Limited (AAA) and American Metal Climax, Inc. (the "Namosi Project").

1. *Barringer Fiji Limited (BFL):* BRL incorporated BFL in connection with an agreement with the Government of Fiji for exclusive prospecting rights on the two main Fiji islands covering all ground except that subject to lease of claims as at July 31st, 1969. BFL was incorporated to assume the rights and responsibilities under such agreement and to carry out the exploration program. American Metal Climax Inc. managed the program in 1973 and 1974. BRL initially acted as technical manager of the program, which was funded by Contifinance S.A. (an affiliate of Roan Selection Trust) in return for an 80 percent interest in BFL.

Under terms of an agreement with Australian Anglo American *et al.* concluded in 1974, BRL relinquished half of its 20 percent interest in BFL to AAA in return for 0.5 percent increase in equity in the Fiji Namosi Project, bringing its total interest from 4.5 to 5.0 percent (See 2 below), and performance of up to \$1,800,000 worth of drilling on the BFL areas. BRL received a fee for its services in assisting conclusion of the agreement. Initial drilling on BFL ground began in late 1974. BRL has no financial obligations for the BFL program.

2. *Australian Anglo American Limited (Namosi Project):* In March 1973 BRL acquired a 4.5 percent interest in a separate Fijian porphyry copper property in the Namosi area of Fiji from AAA. Under terms of the 1974 BFL agreement (See above), BRL received an additional 0.5 percent equity interest in the Namosi project. In 1973 BRL paid \$50,000 for its option on this project and an additional \$100,000 in 1974 as the final installment on its interest. BRL has also contributed on a pro rata basis approximately \$95,000 for the exploration and development expenses. The additional cost to BRL in 1974 to hold its full 5.0 percent until drilling confirms the presence of mineralization of sufficient grade and tonnage to warrant development of a mine is in the range of \$150,000. The project is being managed by American Metal Climax, Inc. and is presently in the drilling stage. Although to-date results are encouraging, the deposits require extensive drilling to assess their commercial viability.

Canadian Program: In August 1968, BRL entered into an agreement with TRW Inc. (TRW) that established a joint venture exploration program between BRL and TRW in a large area within the Canadian Provinces of Manitoba, Saskatchewan, Alberta and portions of the Northwest Territories. TRW ceased funding the program in 1972, after reconnaissance and subsequent exploration phases up to but not including diamond drilling.

After termination of funding by TRW, BRL continued acting in 1973 and 1974 on behalf of a Canadian company, Magenta Explorations Limited (Magenta), to secure funding partners for further development work on several drill targets in the Magenta claim areas. Magenta was formed in December 1971 by BRL and Omar Explorations Inc., a Delaware Corporation (Omar) to which TRW has assigned all its exploration rights. After formation of Magenta, BRL's and Omar's rights and interests were assigned to Magenta in return for shares in stock. BRL received a total of 1 million of the 4.5 million shares issued in this exchange.

In addition, BRL contributed financially to the exploration expenditures of Magenta in 1972 and obtained the right, which it still holds, to convert this contribution into Magenta shares at the rate of \$1.30 per share. The maximum number of shares that can be obtained by conversion is 306 thousand. Although exploration activity funded by a third party continued on Magenta properties in 1974, and will continue throughout 1975, BRL management has reviewed the status of Magenta activity in the light of economic and political conditions prevalent in the Canadian mineral exploration industry and industry's response to these conditions. BRL management has decided, as a result of this review, to write-down approximately 60 percent of the value assigned Magenta in BRL's accounts.

BRL, through its joint venture with Omar, obtained shares in an Ontario company, Royex Mining Limited (Royex). Royex holds interests in a number of claims including a gold property in the Northwest Territories. BRL currently holds 147,914 shares in Royex. This represents a 9.87 percent interest. Drilling has confirmed the presence of moderate tonnage of gold ore and underground work is planned for 1975 to evaluate the economic viability of the prospect.

(3) COMMERCIAL PRODUCTS: INSTRUMENT MANUFACTURE

BRL manufactures and markets specialized instruments and instrument systems that have been generated by the company's R & D activities.

In 1974 Commercial Products was established as an autonomous division within BRL. BRL conducts its manufacturing operations in a separate facility near its main headquarter premises in Toronto, and from 1972 to 1974 maintained a small European sales branch office near London, England. At the end of 1974 management decided to retain only part-time staff at this location, as the economic returns from the U.K. branch no longer justified a full office staff.

The principal market for BRL products is Canada, the United States and Europe. Revenues from instrument sales and rentals in 1974 amounted to approximately \$560,000 (\$516,000 in 1973).

BRL now manufactures patented and/or proprietary remote sensing instruments used chiefly for geophysical mineral exploration, air pollution/environmental monitoring; and nuclear process control systems. Development and product-engineering costs are expensed as incurred and included in the company's cost of sales.

- (a) *Geophysical Instruments:* BRL introduced a new portable proton precession mini-magnetometer (GM-122) in 1973 and in response to strong market demand and customer response upgraded the instrument in 1974. In addition, BRL in 1974 continued a development program of a successor line to BRL's successful Type 104 magnetometer. This new magnetometer will be marketed in 1975 in airborne, oceanographic and ground versions.
- (b) *Nuclear Process Control:* Since 1971 BRL has produced and sold three different kinds of heavy water (D₂O) process control instruments. These have been designed for Canadian CANDU-type reactors in nuclear power plants and the heavy water industry to monitor ratios of heavy and light water and detect trace concentrations of heavy water. BRL believes the sales success of the CANDU-type reactor worldwide will generate further sizeable orders of these monitors. The original development work was performed in co-operation with the Canadian Atomic Energy Corporation, and no similar instrumentation is presently available.

- (c) *Air Pollution/Environmental Monitoring*: BRL originally developed correlation spectrometric techniques for application in the remote sensing of gases and earth resource exploration. In 1967 the company recognized the air pollution monitoring applications of this technique and BRL began producing an instrument line – the COSPEC series – designated to measure SO₂ and NO₂ simultaneously and continuously in the atmosphere. In addition to the direct sales from its Toronto location, BRL received a percentage royalty on the sales and service operations of Environmental Measurements Inc., of San Francisco that employ the COSPEC. BRL also has an agreement with Japan Spectroscopic Company Limited, Tokyo, (Jasco) under which Jasco is licensed to sell the COSPEC series in Japan and other Southeast Asian countries.

(4) ANALYTICAL CHEMISTRY AND BIOLOGY SERVICES

During the past year BRL's Analytical Chemistry and Biology Services were established as a separate organization unit within the company. This step was taken to enhance the Company's ability to expand and market its capabilities in analytical chemical and biological services and serve a wider range of clients. Previously this organization unit was part of the Exploration Services group.

BRL's Analytical Chemistry and Biology staff consists of professional chemists and biologists – two at the doctoral level – who apply specialized knowledge and instrumentation developed from research and development contracts to routine analytical service work in the following areas: (i) geochemistry and geology; (ii) pollution control; (iii) medicine; (iv) industrial process control; (v) agriculture and animal studies.

Analyses are performed on samples submitted by customers on a custom-oriented production basis. Additionally, BRL's staff undertake research and development projects on a contract basis to Government agencies and industrial clients. Clients for analytical services in 1974 included most major Canadian and several international mining and exploration companies, together with several Canadian Provincial agencies and the Federal Resource Agency. Contract research projects have been undertaken for:

- Applied Research Laboratories (Los Angeles)
- Instrumentation Laboratory (Boston)
- Exxon (Houston)
- Canada Centre for Inland Waters (Burlington, Ontario and Vancouver, British Columbia)
- Ministère des Richesses Naturelles (Quebec)
- Department of the Environment (Canada)
- British Petroleum (Canada).

BRL also provided substantial analytical research and development work for the AIRTRACE program on behalf of the Company's joint venture partners.

Revenues from analytical services amounted to \$520,000 in 1974 (\$211,000 in 1973).

BRL maintains laboratory analysis facilities in Toronto and Whitehorse, Yukon Territory. The Whitehorse laboratory operates only during the months of May through October and is exclusively used for geochemical and geological analysis. The Toronto laboratory operates throughout the year and it is through this facility that much of the growth in analytical services has occurred.

(5) LICENSING OF PATENTED PROPRIETARY PRODUCTS

BRL grants licenses for the right to use, manufacture and/or sell certain proprietary techniques and instrumentation developed by BRL, and on which the Company holds patents or other rights.

Revenue to BRL in 1974 from its licenses was approximately \$790,000 (\$844,000 in 1973). The major components of these license fees were derived from agreements regarding the BRL INPUT and AIR-TRACE systems.

INPUT System Agreement

BRL has a worldwide exclusive license granted by the purchaser of BRL's INPUT patents to manufacture this airborne geophysical system and to jointly grant sublicenses to others for their use. In 1974, five systems were licensed to two companies engaged in providing contract airborne exploration surveys. The two licensees paid BRL rental for the equipment as well as license fees for every mile flown on survey, amounting to approximately \$402,000 in 1974 (\$368,000 in 1973).

According to data compiled by the Society for Exploration Geophysicists, INPUT surveys represent approximately 50 percent of the total dollar volume of revenues from worldwide survey mileage flown using electro-magnetic techniques.

AIRTRACE Exploration Survey Company Joint Ventures

During 1973 and 1974 BRL entered into agreements establishing three airborne exploration survey companies licensed to operate the BRL-developed and patented AIRTRACE system. These companies and their locations are: Barringer Surveys Limited (BSL), Johannesburg; Minsearch Surveys Limited (Minsearch), Toronto; and Barringer Hydrocarbons Limited (BHL), Toronto, Canada.

BSL was incorporated in April 1973 in partnership with Gold Fields of South Africa. BRL holds a 49 percent interest in BSL, which was granted an exclusive license to use BRL's AIRTRACE airborne geochemical prospecting system in Southern Africa for mineral and hydrocarbon exploration. BSL had no operations in 1974. The company is expected to commence operations in 1975 with an aircraft fully outfitted with an AIRTRACE and other ancillary airborne and ground systems. When BSL is operating commercially, BRL is to receive royalty income for each line mile of survey flown. At year-end 1974, BSL had approved a program of airborne EM development specifically tailored to its aircraft. BRL will perform this additional development work.

Minsearch Surveys Limited was incorporated in February 1974 in partnership with Anglo American Corporation of Canada Limited (Amcan), Hudson Bay Mining and Smelting Co., Limited (HBMS), and Minerals and Resources Corporation Limited (Minorco). Minsearch was granted a worldwide exclusive license for the commercial exploitation of AIRTRACE, except for those areas covered by prior geographically limited exclusive agreements. In consideration for the grant of license and know-how rights to Minsearch, BRL received cash in the amount of \$550,000 in 1974 and accounted for this fee by taking 50 percent into income and crediting deferred income with 50 percent. BRL will also receive additional cash of \$500,000 in 1975 and \$50,000 in 1976 and will account for these amounts in a similar manner. In addition, BRL is to receive royalties from commercial operations of Minsearch based on the number of line miles flown. BRL has a 50 percent interest in Minsearch, with the Anglo American group holding a controlling vote on the Minsearch Board. Minsearch performed substantial test flying in 1974 and is expected to begin commercial operations during 1975.

In addition, BRL in 1974 transferred to Minsearch the shares of its wholly-owned Australian subsidiary company Barringer Geosurveys Pty. Ltd. (BGS) and will be compensated for this transfer from future net cash flows of Minsearch. Inter company loans from BRL to BGS carried in BRL and BR Inc. accounts at \$388,000 have been assumed by Minsearch. The non-exclusive agreement that BGS has with Allstate Exploration Pty., Ltd. in Australia for mineral exploration remains in force. Any equity interest received by BGS in deposits discovered using BRL's airborne systems will be held in trust for Minsearch.

BRL also formed a joint company – Barringer Hydrocarbons Limited – with Amcan, HBMS, and Minorco. BHL was granted a license to use the AIRTRACE system for hydrocarbon and geothermal resource exploration. BRL has a 70 percent interest in BHL. BHL was inactive in 1974, but a portion of the Minsearch R & D funding was directed toward aspects of the AIRTRACE hydrocarbon R & D program.

Under the terms of its agreement with Minsearch, BSL and BHL, BRL will receive a royalty based on the number of survey lines miles flown with the AIRTRACE system when the companies begin commercial operation. The policy of each joint company is expected to be either to negotiate (a) a combination of service fee and participation in any discoveries made; or (b) a participation in any discoveries; or (c) a higher rate of fee in lieu of participation. Minsearch's and BSL's ability to obtain the most favorable fee and participation terms will be a function of conditions prevailing in the mineral exploration industry and the technical strength of the AIRTRACE and its related systems.

Item 1. (b) (1) COMPETITION

There are no companies that compete directly with BRL with instrumentation similar to the patented INPUT and AIRTRACE systems. However many companies have techniques and methods that do compete in the airborne exploration market. Likewise, there are numerous companies engaged in the manufacture of geophysical instruments that compete with various products of BRL and that provide exploration and analytical chemical services similar to those BRL offers.

Similarly there are numerous pollution monitoring devices available on the market. These do not provide instantaneous specific and continuous readings available by use of BRL's patented electro-optical methods. These devices do, however, compete in the same area of use as BRL's instruments and BRL is not a major manufacturer in the production of pollution monitoring devices.

Item 1. (b) (2) REVENUES

With the exception of Minsearch Surveys Limited and Barringer Surveys Limited, which accounted for 28 percent and 15 percent respectively, no single customer accounted for more than 10 percent of total revenue in 1974.

Item 1. (b) (3) BACKLOG

The following table sets forth the backlog of work on hand as at December 31, 1973 and December 31, 1974.

| | As at Dec. 31/74 | As at Dec. 31/73 |
|--|---------------------|---------------------|
| (1) Research and Development Services | \$ 770,000 | \$1,151,000 |
| (2) Natural Resource Exploration Ventures and Services | 458,000 | 658,000 |
| (3) Commercial Products: Instrument Manufacture | 360,000 | 53,000 |
| (4) Analytical Chemistry and Biology Services | 168,000 | — |
| (5) Licensing | 425,000 | 1,250,000 |
| TOTAL | <u>\$2,181,000</u> | <u>\$3,112,000</u> |

It is estimated that 90 percent of the backlog work on hand as at December 31, 1974 will be filled during the current fiscal year.

Item 1. (b) (4) SOURCES AND AVAILABILITY OF RAW MATERIALS

BRL's manufactured products are basically comprised of assembled components. The items purchased by BRL are of a standardized nature and are available from numerous sources. BRL has no long-term agreement or requirement contracts for any of the items purchased by it and apart from delays in the delivery of some components caused by often extremely tight supply conditions prevailing in the market does not anticipate any problem in obtaining the necessary materials or parts for manufacture of the equipment it produces.

Item 1. (b) (5) PATENTS AND LICENSING

BRL has 19 United States patents relating to its equipment and systems and has applied for an additional 4 patents. An aggregate of 165 patents and patent applications have been issued or are pending in countries other than the United States. No United States patent owned by BRL will expire prior to 1978. Although BRL regards its patents and patent applications to be of value, it does not deem its business as a whole to be materially dependent on any one or more patents or patent applications.

Item 1. (b) (6) RESEARCH AND DEVELOPMENT

Reference is made to Item 1. (a) PRINCIPAL PRODUCTS AND SERVICES and (1) RESEARCH AND DEVELOPMENT SERVICES.

Item 1. (b) (7) DISCHARGE OF MATERIALS INTO THE ENVIRONMENT

Not applicable.

Item 1. (b) (8) EMPLOYEES

As of December 31, 1974 there were 105 persons, including officers, in the regular employ of the Registrant and its wholly owned subsidiary.

Item 1. (b) (9) SEASONAL BUSINESS

None of a nature material to the Company's operations.

Item 1. (c) INFORMATION AS TO LINES OF BUSINESS AND CLASSES OF SIMILAR PRODUCTS AND SERVICES

Total sales and revenues for the years 1970 through 1974 for the major lines of business and classes of products and services, expressed in percent of total revenue as shown in the consolidated statement of operations herein, were as follows:

| | 1970 | 1971 | 1972 | 1973 | 1974 |
|--|-------------|-------------|-------------|-------------|-------------|
| Research and Development Services | 15 | 29 | 12 | 15 | 27 |
| Natural Resource Exploration Ventures and Services | 69 | 52 | 60 | 43 | 22 |
| Commercial Products: Instrument Manufacture | 6 | 8 | 17 | 17 | 17 |
| Analytical Chemistry and Biology | — | — | — | — | 14 |
| Licensing | 10 | 11 | 11 | 25 | 20 |
| | <u>100%</u> | <u>100%</u> | <u>100%</u> | <u>100%</u> | <u>100%</u> |

The major lines of business contributed to the results of operations as follows:

| | 1970 | 1971 | 1972 | 1973 | 1974 |
|--|-------------|-------------|-------------|-------------|-------------|
| Research and Development Services | 10 | 26 | 10 | 2 | 17 |
| Natural Resource Exploration Ventures and Services | 56 | 42 | 45 | 23 | 9 |
| Commercial Products: Instrument Manufacture | 9 | 5 | 17 | 6 | 15 |
| Analytical Chemistry and Biology | — | — | — | — | 14 |
| Licensing | 25 | 27 | 28 | 69 | 45 |
| | <u>100%</u> | <u>100%</u> | <u>100%</u> | <u>100%</u> | <u>100%</u> |

These figures, and the changes from 1973, reflect the increase in AIRTRACE-related R & D activities and license fee payments.

Contributions to the results of operations by line of business, as presented above, are based on income before taxes and extraordinary credits as shown in the consolidated statement of operations herein before application of the common or corporate costs of general and administrative activities and functions.

Barringer Research Inc. and Subsidiary

CONSOLIDATED STATEMENT OF EARNINGS (LOSS)

For the Five Years Ended December 31, 1974

ITEM 2. SUMMARY OF OPERATIONS

| | 1970 | 1971 | 1972 | 1973 | 1974 |
|---|----------------------|------------------------|-------------------------|-------------------------|----------------------|
| | \$ | \$ | \$ | \$ | \$ |
| REVENUE | <u>3,253,282</u> | <u>3,557,233</u> | <u>3,911,927</u> | <u>3,361,067</u> | <u>3,807,331</u> |
| COSTS AND EXPENSES | | | | | |
| Cost of goods sold | 2,297,312 | 2,533,355 | 2,951,854 | 2,220,613 | 2,514,019 |
| General and administrative expenses | 625,215 | 843,776 | 844,424 | 1,059,163 | 918,166 |
| Research and development expenditures | <u>217,670</u> | <u>276,305</u> | <u>875,966</u> | <u>489,643</u> | <u>85,295</u> |
| | <u>3,140,197</u> | <u>3,653,436</u> | <u>4,672,244</u> | <u>3,769,419</u> | <u>3,517,480</u> |
| OPERATING INCOME (LOSS) | <u>113,085</u> | <u>(96,203)</u> | <u>(760,317)</u> | <u>(408,352)</u> | <u>289,851</u> |
| OTHER (INCOME) AND EXPENSES | | | | | |
| Write-down of advances | — | — | — | — | 211,487 |
| Loss on sale of shares in non-associated companies | — | 32,907 | 32,417 | 19,246 | 3,003 |
| (Gain) on sale of subsidiary company | — | — | — | — | (112,897) |
| Interest — | | | | | |
| Long-term debt | 53,987 | 34,200 | 26,905 | 30,552 | 33,131 |
| Other — net | 7,544 | — | — | 48,900 | 95,187 |
| Other | <u>(2,065)</u> | <u>(108,924)</u> | <u>7,006</u> | <u>(10,254)</u> | <u>18,858</u> |
| | <u>59,466</u> | <u>(41,817)</u> | <u>66,328</u> | <u>88,444</u> | <u>248,769</u> |
| EARNINGS (LOSS) BEFORE INCOME TAXES AND EXTRAORDINARY ITEMS | <u>53,619</u> | <u>(54,386)</u> | <u>(826,645)</u> | <u>(496,796)</u> | <u>41,082</u> |
| INCOME TAX PROVISION | <u>47,000</u> | <u>4,500</u> | <u>—</u> | <u>(11,000)</u> | <u>10,000</u> |
| EARNINGS (LOSS) BEFORE EXTRAORDINARY ITEMS | <u>6,619</u> | <u>(58,886)</u> | <u>(826,645)</u> | <u>(485,796)</u> | <u>31,082</u> |
| EXTRAORDINARY ITEMS | | | | | |
| Benefit of tax loss carry forward | 47,000 | 4,500 | 90,000 | — | 20,000 |
| Gain on sale of investment in non-associated company, less income taxes | — | — | 212,934 | 26,000 | — |
| | <u>47,000</u> | <u>4,500</u> | <u>302,934</u> | <u>26,000</u> | <u>20,000</u> |
| NET EARNINGS (LOSS) FOR THE YEAR | <u><u>53,619</u></u> | <u><u>(54,386)</u></u> | <u><u>(523,711)</u></u> | <u><u>(459,796)</u></u> | <u><u>51,082</u></u> |
| AVERAGE NUMBER OF SHARES OUTSTANDING | <u>832,700</u> | <u>764,600</u> | <u>764,600</u> | <u>772,624</u> | <u>781,087</u> |
| EARNINGS (LOSS) PER SHARE | | | | | |
| Income (loss) before extraordinary items | <u>\$.01</u> | <u>(\$.08)</u> | <u>(\$1.08)</u> | <u>(\$0.62)</u> | <u>\$0.04</u> |
| Extraordinary items | <u>\$.05</u> | <u>\$.01</u> | <u>\$0.40</u> | <u>\$0.03</u> | <u>\$0.02</u> |
| Net earnings (loss) for the year | <u><u>\$.06</u></u> | <u><u>(\$.07)</u></u> | <u><u>(\$0.68)</u></u> | <u><u>(\$0.59)</u></u> | <u><u>\$0.06</u></u> |

MANAGEMENT DISCUSSION AND ANALYSIS OF THE STATEMENT OF CONSOLIDATED INCOME

The following information is provided to further explain certain financial information as shown in the Statement of Consolidated Income. (See Note 1 to the Notes to Consolidated Financial Statements for a summary of the accounting policies that are significant in evaluating the results of Barringer's operations).

REVENUES

The decline in revenues from 1972 to 1973 resulted from cessation of a large mineral exploration program that was managed by Barringer and funded by a third party. Termination of funding for this program at the end of 1972 caused a temporary decline in Barringer's manpower utilization levels during the first half of 1973 and therefore a corresponding drop in revenues.

The subsequent growth in revenue from 1973 to 1974 was due in major part to R & D programs undertaken for the joint venture companies (Minsearch Surveys Limited, Barringer Surveys Limited) that are funded by third parties. Further, Barringer experienced higher levels of personnel utilization in 1974 than in 1973 in its major service businesses of analytical chemistry and contract research and development.

COSTS AND EXPENSES

The cost of goods sold has been relatively constant at a percentage of total revenue during the last 5 years (i.e., approximately 70 percent). In 1972 the cost of goods sold was significantly higher than this average (i.e., 75 percent) because of the level of exploration field service activities associated with the mineral exploration program noted above. This program was performed at full recovery of cost but without a fee. Therefore the cost of goods sold was substantially higher in proportion to gross revenue for this year than in prior and subsequent years.

Cost of goods sold in 1974 were lower (i.e., 66 percent) than the past 5 years average, principally because of higher personnel utilization levels and increasing control of the company's purchasing function.

Selling, general and administrative expenses increased substantially from 1972 to 1973 because of the management and administration costs of Barringer's Australian subsidiary, Barringer Geosurveys Pty., Ltd., (BGS) and higher professional service fees associated with negotiations of certain agreements with international mining companies in Australia, Republic of South Africa and the United Kingdom.

These costs declined from 1973 to 1974 both absolutely and as a percentage of gross revenue chiefly because of cessation of the bulk of BGS' activities as well as increasing management attention to this cost area.

Research and development expenditures declined substantially in both the periods 1972 to 1973 and 1973 to 1974, both in relative and absolute dollar terms. This decline reflects the termination of substantial in-house funding of important proprietary and patent-oriented R & D work that has enabled the Company to secure certain license and royalty fees for certain of its exploration systems. The decline between 1972 and 1973 is due primarily to the fact that in 1973 the Company secured some extensive but non-recurring external funding for test flying a patented device that reduced the costs of the internally funded R & D. The sharp drop between 1973 and 1974 is principally due to the fact that during 1974 the bulk of Barringer's R & D activity was funded by third parties in joint venture companies.

Research and development costs of \$85,000 incurred in 1974 and expensed as incurred relate primarily to the unrecovered costs associated with personnel who are in part funded by government grants and are engaged in basic R & D activities that Barringer management believes important to its future patenting position. This work is not yet funded by third parties, though it is Barringer's intent to secure outside funding whenever it can be negotiated.

OTHER INCOME AND EXPENSES

The write-down of advances referred to in Note 3 of the Consolidated Statements of \$211,487 represents a disposition of approximately 60 percent of the value assigned to a mineral exploration venture (Magenta Explorations Limited) that Barringer had entered into in the years 1969 to 1972. As outlined in Note 3 to the Consolidated Statements, exploration work is still proceeding in certain of the Magenta claim areas, but Barringer management believes it desirable to write-down a portion of the value of this asset in a manner that corresponds to the values assigned mining claims where exploration programs are no longer being undertaken and where there is no firm indication of interest by exploration companies of future program activation.

The gain on sale of a subsidiary company of \$112,897 represents the recorded realized gain on the sale of Barringer Geosurveys Pty. Ltd. (BGS) to Minsearch Surveys Limited, a company in which Barringer has a 50 percent equity interest. (See Note 13 to the Consolidated Financial Statements). The specialized airborne survey flying performed by BGS has been temporarily halted and key personnel transferred to Barringer's headquarters laboratories to perform work on the Minsearch program. It is expected that Minsearch will operate in Australia in the future through the vehicle of BGS.

Interest expenses increased from \$48,900 in 1973 to \$95,185 in 1974 because of a substantial increase in Barringer's bank line of credit due to the Company's need in 1974 for working capital. At the same time as the line of credit increased there was a significant rise in interest rates during 1974 that were applied to this line of credit.

EXTRAORDINARY ITEMS

Tax losses of \$187,000 were used in 1972 to reduce income taxes and gave rise to an extraordinary credit of \$90,000. Similarly, tax loss carry forwards were used to reduce 1974 income taxes and gave rise to an extraordinary credit of \$20,000. (See Note 9 (b) to the Consolidated Statements).

The gain on sale of investment in a non-associated company in 1972 of \$212,934 represents the gain on the sale of shares in a company engaged in the pollution and environmental monitoring business that were acquired by Barringer in exchange for long-term debt and warrants to acquire common shares of Barringer.

MARKET AND DIVIDEND INFORMATION

The principal market for the corporation's securities is the over the counter market. Prices for these securities are quoted in NASDAQ (National Association of Securities Dealers Inc.)

SUMMARY OF MARKET PRICES

| | 1974 | | 1973 | |
|----------------|--------|--------|--------|--------|
| | High | Low | High | Low |
| First Quarter | \$6.00 | \$2.00 | \$9.25 | \$5.25 |
| Second Quarter | 3.25 | 1.50 | 7.75 | 5.50 |
| Third Quarter | 2.50 | 1.00 | 6.38 | 4.25 |
| Fourth Quarter | 2.00 | .38 | 5.00 | 2.50 |

There were no dividends paid during 1973 or 1974.

ITEM 3. PROPERTIES

BRL's offices, laboratories and manufacturing facilities are located at 304 Carlingview Drive, Metropolitan Toronto, Rexdale, Ontario, Canada, M9W 5G2, in a building containing 15,000 square feet of floor area constructed in 1965. BRL occupies the building under lease expiring in January 1986 at a rental of \$16,500 per year.

BRL also leases approximately 13,000 square feet of floor space at 44 Fasken Drive, about one block away from the 304 Carlingview Drive headquarters. BRL occupies the building under lease expiring May, 1979 at a rental of \$19,800 per year.

ITEM 4. PARENT AND SUBSIDIARIES

| Name | State, Province or Country of Incorporation | Percentage Voting Securities Owned or Controlled |
|--|---|--|
| Dr. Anthony R. Barringer | Including Trust | 38% |
| Dr. D. Richard Clews | Including Trust | 16% |
| Barringer Research Inc. Subsidiary of Barringer Research Inc. | Delaware | |
| Barringer Research Limited ("BRL") Subsidiary of "BRL" | Ontario, Canada | 100% |
| Minsearch Surveys Limited | Canada | *50% |
| Barringer Surveys Limited | Republic of South Africa | 49% |

*Represents 49% of voting securities.

ITEM 5. PENDING LEGAL PROCEDURES

None

ITEM 6. INCREASES AND DECREASES IN OUTSTANDING EQUITY SECURITIES

- (a) (1) (i) Number of shares of Common Stock outstanding at December 31, 1973, was 867,400.
(ii) Number of shares of Common Stock outstanding at December 31, 1974, was 867,400.

ITEM 7. APPROXIMATE NUMBER OF EQUITY SECURITY HOLDERS

| BARRINGER RESEARCH INC. | |
|--|--|
| (A) | (B) |
| Title or Class | Approximate Number of Record Holders March 7th, 1975 |
| Convertible Promissory Notes due serially until 1978 | 1 |
| Common Stock (par value \$.01 per share) | 756 |
| Seven-year Warrants to Purchase Common Stock | 5 |

ITEM 8. EXECUTIVE OFFICERS OF THE REGISTRANT

| | | |
|--------------------------|---------------------------------|----|
| Dr. Anthony R. Barringer | <i>President</i> | 49 |
| Dr. D. Richard Clews | <i>Executive Vice President</i> | 53 |
| Dr. Michael D. Silvester | <i>Vice President</i> | 31 |
| Brandon W. Sweitzer | <i>Vice President</i> | 33 |
| David A. Whiteman | <i>Vice President</i> | 47 |
| Robert J. Armstrong | <i>Secretary</i> | 44 |
| Kenneth H. Dalton | <i>Controller</i> | 31 |

There are no family relationships between any of the executive officers of the Registrant or BRL.

BUSINESS EXPERIENCE OF OFFICERS FOR THE PAST FIVE YEARS

| | |
|--------------------------|---|
| Dr. Anthony R. Barringer | President of the Registrant and Barringer Research Limited |
| Dr. D. Richard Clews | Executive Vice President of the Registrant and Barringer Research Limited |
| Dr. Michael D. Silvester | Assistant Lecturer and Research Assistant at Imperial College, London, England, from 1970 to October 1971; Barringer Research Fellow at Imperial College to October 1972; Chief Chemist at Barringer Research Limited to April 1974; Manager, Analytical Chemistry and Biology Division, Barringer Research to November 1974; Vice President of the Registrant and Barringer Research Limited since November, 1974. |
| Brandon W. Sweitzer | Associate, McKinsey & Company Inc. to 1971; Senior Staff Member, Council on International Economic Policy, The White House, 1971 to 1972; Executive Assistant to the Secretary of Commerce of the United States to June 1973; Vice President of the Registrant and Barringer Research Limited since June 1973. |
| David A. Whiteman | Vice President of the Registrant and Barringer Research Limited. |
| Robert J. Armstrong | Barrister and Solicitor, Partner of Messrs. Blackwell, Law, Treadgold and Armstrong, Secretary of the Registrant and Barringer Research Limited. |
| Kenneth H. Dalton | Controller of Design Lithographers Limited to July 1974; Controller of the Registrant and Barringer Research Limited since July 1974. |

ITEM 9. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Section 145 of the General Corporation Law of Delaware provides for indemnification of directors, officers, employees and agents against expenses, judgements, fines and settlements where such persons act in good faith and in a manner not opposed to the best interests of the Corporation and without reason to believe his conduct was unlawful. In actions by or in the right of the Corporation, such indemnification is limited to expenses. Determination that the applicable standard of conduct has been met is made by disinterested directors, independent legal counsel, or the stockholders. The Corporation is empowered to insure such persons against such liability, but no such insurance has been obtained.

The Certificate of Incorporation of the Registrant provides that directors and officers shall be indemnified to the full extent permitted under the General Corporation Law of the State of Delaware.

ITEM 10. FINANCIAL STATEMENTS AND EXHIBITS

(a) Financial Statements and Schedules (See index to financial statements herein)

(b) Agreements

- (i) Agreement dated 5th February, 1974 between Anglo American Corporation of Canada Limited and Barringer Research Limited.
- (ii) Agreement dated 29th July, 1974 between Anglo American Limited *et al* and Barringer Research Limited.

PART II

Omitted Pursuant to Instruction H, Form 10-K.

SIGNATURES

Pursuant to the requirements of Section 13 or 15 (d) of the Securities Exchange Act of 1934, the Registrants have duly caused this report to be signed on their behalf by the undersigned, thereunto duly authorized.

BARRINGER RESEARCH INC.
(Registrant)

by Brandon W. Sweitzer
Vice President, Finance

BARRINGER RESEARCH LIMITED
(Registrant)

by Brandon W. Sweitzer
Vice President, Finance

DATED: March 26th, 1975

Barringer Research Inc. and Consolidated Subsidiary

**FINANCIAL STATEMENTS AND SCHEDULES
FOR THE YEARS ENDED DECEMBER 31, 1973 and 1974**

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III Investments

V Fixed Assets

VI Accumulated Depreciation and Amortization of Fixed Assets

XII Reserves

XVI Supplementary Income Statement Information

All other schedules are omitted because of the absence of the conditions under which they are required, or because the information called for is included in the financial statements or notes thereto.

Barringer Research Inc. and Subsidiary

CONSOLIDATED BALANCE SHEET

As at December 31, 1974 and 1973

| | ASSETS | |
|--|------------------|------------------|
| | 1974 | 1973 |
| | \$ | \$ |
| CURRENT ASSETS | | |
| Cash | 28,284 | 42,453 |
| Accounts receivable — | | |
| Trade, less allowance for doubtful accounts, | | |
| 1974 — \$28,377; 1973 — \$33,296 | 537,073 | 657,224 |
| Corporate joint ventures | 303,094 | 72,471 |
| Inventories (note 2) | 503,997 | 716,084 |
| Deposits, advances and prepaid expenses | 32,512 | 65,609 |
| Income taxes recoverable | 10,000 | — |
| | <u>1,414,960</u> | <u>1,553,841</u> |
| Advances to associated company (note 13) | 387,625 | — |
| Subsidiaries not consolidated (note 1) | — | 9,938 |
| Investments and advances (note 3 and Schedule III) | 932,038 | 774,440 |
| | <u>1,319,663</u> | <u>784,378</u> |
| FIXED ASSETS (note 4 and Schedules V and VI) | 418,935 | 676,738 |
| OTHER ASSETS — at cost, less amortization (note 1(d)) | | |
| Patents and trademarks | 158,735 | 149,804 |
| | <u>3,312,293</u> | <u>3,164,761</u> |

LIABILITIES

| | 1974 | 1973 |
|---|------------------|------------------|
| | \$ | \$ |
| CURRENT LIABILITIES | | |
| Bank indebtedness (note 5) | 620,000 | 894,282 |
| Current portion of long-term debt | 60,000 | 60,000 |
| Accounts payable | 344,477 | 446,132 |
| Accrued liabilities | 168,509 | 183,127 |
| Income taxes | — | 18,000 |
| Short-term advances — | | |
| Associated company (note 13) | 150,000 | — |
| Other | 167,362 | — |
| | <u>1,510,348</u> | <u>1,601,541</u> |
| DEFERRED INCOME (notes 3 and 13 and Schedule XII) | 709,833 | 464,190 |
| LONG-TERM DEBT (note 6) — Convertible subordinated promissory notes, less amount included in current liabilities | 185,000 | 245,000 |
| | <u>2,405,181</u> | <u>2,310,731</u> |

SHAREHOLDERS' EQUITY

| | | |
|---|------------------|------------------|
| COMMON STOCK (notes 7 and 8) | | |
| Authorized — | | |
| 2,000,000 shares of common stock of 1¢ par value each | | |
| Issued and fully paid — | | |
| 867,400 shares | 8,674 | 8,674 |
| PAID-IN SURPLUS (note 7) | 1,876,143 | 1,874,288 |
| DEFICIT | (971,303) | (1,022,385) |
| | <u>913,514</u> | <u>860,577</u> |
| Less common stock in Treasury — at cost, | | |
| 88,400 shares (1973 — 90,400 shares) | 6,402 | 6,547 |
| | <u>907,112</u> | <u>854,030</u> |
| | <u>3,312,293</u> | <u>3,164,761</u> |

Barringer Research Inc. and Subsidiary

CONSOLIDATED STATEMENT OF EARNINGS (LOSS)

For the Years Ended December 31, 1974 and 1973

| | 1974 | 1973 |
|--|------------------|------------------|
| | \$ | \$ |
| REVENUE | <u>3,807,331</u> | <u>3,361,067</u> |
| COSTS AND EXPENSES | | |
| Cost of goods sold | 2,514,019 | 2,220,613 |
| General and administrative expenses | 918,166 | 1,059,163 |
| Research and development expenditures (note 1(e)) | <u>85,295</u> | <u>489,643</u> |
| | <u>3,517,480</u> | <u>3,769,419</u> |
| OPERATING INCOME (LOSS) | <u>289,851</u> | <u>(408,352)</u> |
| OTHER (INCOME) AND EXPENSES | | |
| Write down of advances (note 3) | 211,487 | — |
| Loss on sale of shares in non-associated companies | 3,003 | 19,246 |
| (Gain) on sale of subsidiary company (note 13) | (112,897) | — |
| Interest — | | |
| Long-term debt | 33,131 | 30,552 |
| Other — net | 95,187 | 48,900 |
| Other | <u>18,858</u> | <u>(10,254)</u> |
| | <u>248,769</u> | <u>88,444</u> |
| EARNINGS (LOSS) BEFORE INCOME TAXES AND EXTRAORDINARY ITEMS | 41,082 | (496,796) |
| INCOME TAX PROVISION, LESS RECOVERY (RECOVERED) (note 9) | <u>10,000</u> | <u>(11,000)</u> |
| EARNINGS (LOSS) BEFORE EXTRAORDINARY ITEMS | <u>31,082</u> | <u>(485,796)</u> |
| EXTRAORDINARY ITEMS | | |
| Benefit of tax loss carry forward | 20,000 | — |
| Gain on sale of investment in non-associated company, less income taxes | <u>—</u> | <u>26,000</u> |
| | <u>20,000</u> | <u>26,000</u> |
| NET EARNINGS (LOSS) FOR THE YEAR | <u>51,082</u> | <u>(459,796)</u> |
| AVERAGE NUMBER OF SHARES OUTSTANDING (note 12) | <u>781,087</u> | <u>772,624</u> |
| EARNINGS (LOSS) PER SHARE (note 12) | | |
| Income (loss) before extraordinary items | \$0.04 | (\$0.62) |
| Extraordinary items | <u>\$0.02</u> | <u>\$0.03</u> |
| Net earnings (loss) for the year | <u>\$0.06</u> | <u>(\$0.59)</u> |

Barringer Research Inc. and Subsidiary

CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION

For the Years Ended December 31, 1974 and 1973

| | 1974 | 1973 |
|--|----------------|------------------|
| | \$ | \$ |
| FUNDS PROVIDED | | |
| From operations – | | |
| Net earnings (loss) for the year | 51,082 | (485,796) |
| Items not involving funds – | | |
| Depreciation and amortization | 155,267 | 181,354 |
| Loss on investments and other assets | 26,858 | 19,246 |
| Write down of advances | 211,487 | – |
| Gain on sale of subsidiary company less operating losses in current period | (74,063) | – |
| | <u>370,631</u> | <u>(285,196)</u> |
| Deferred income | 319,353 | 37,500 |
| Sale of investments, less income taxes | – | 26,000 |
| Issue of shares of common stock | – | 52,800 |
| Disposals of fixed assets – net | – | 219,154 |
| Reclassification of a non-current asset to current | – | 18,989 |
| | <u>689,984</u> | <u>69,247</u> |
| FUNDS APPLIED | | |
| Investments and advances | 189,771 | 52,517 |
| Reduction in long-term debt | 60,000 | 60,000 |
| Additions to patents and trademarks | 26,755 | 70,750 |
| Purchases of fixed assets – net | 37,581 | – |
| Reclassification of current assets to non-current | 379,158 | – |
| Decrease in working capital resulting from sale of subsidiary | 44,407 | – |
| | <u>737,672</u> | <u>183,267</u> |
| DECREASE IN WORKING CAPITAL | <u>47,688</u> | <u>114,020</u> |
| CHANGES IN COMPONENTS OF WORKING CAPITAL | | |
| WORKING CAPITAL (DEFICIENCY) – BEGINNING OF YEAR | (47,700) | 66,320 |
| Decrease in cash | 14,169 | 108,315 |
| Decrease (increase) in inventories | 212,087 | (103,386) |
| Decrease (increase) in receivables | (110,472) | 9,765 |
| Decrease (increase) in other current assets | 23,097 | (20,938) |
| (Decrease) increase in bank indebtedness | (274,282) | 481,616 |
| (Decrease) increase in other current liabilities | 183,089 | (361,352) |
| | <u>47,688</u> | <u>114,020</u> |
| DECREASE IN WORKING CAPITAL | <u>47,688</u> | <u>114,020</u> |
| WORKING CAPITAL DEFICIENCY – END OF YEAR | <u>95,388</u> | <u>47,700</u> |

Barringer Research Inc. and Subsidiary

CONSOLIDATED STATEMENT OF DEFICIT

For the Years Ended December 31, 1974 and 1973

| | 1974 | 1973 |
|----------------------------------|------------------|--------------------|
| | \$ | \$ |
| DEFICIT – BEGINNING OF YEAR | (1,022,385) | (562,589) |
| Net earnings (loss) for the year | <u>51,082</u> | <u>(459,796)</u> |
| DEFICIT – END OF YEAR | <u>(971,303)</u> | <u>(1,022,385)</u> |

Barringer Research Inc.

WORKING PAPER IN SUPPORT OF EARNINGS PER SHARE AS SHOWN BY THE CONSOLIDATED STATEMENT OF EARNINGS (LOSS)

For the Two Years Ended December 31, 1974

| | 1974 | 1973 |
|--|-----------------|-----------------|
| AVERAGE MARKET VALUE PER SHARE OF COMMON STOCK | \$ 2.5 | \$ 6 |
| WEIGHTED AVERAGE NUMBER OF SHARES OUTSTANDING, EXCLUDING COMMON STOCK EQUIVALENTS | 867,400 | 863,024 |
| COMMON STOCK EQUIVALENTS: | | |
| Warrants | — (3) | — (1) |
| Options: | | |
| Employment Agreements | — (3) | — (2) |
| 1968 Stock Option Plan | 1,087 | — (2) |
| 1970 Stock Option Plan | 1,000 | — (2) |
| Unqualified Stock Option Plan | — (3) | — (2) |
| TREASURY STOCK ACQUIRED | <u>(88,400)</u> | <u>(90,400)</u> |
| WEIGHTED AVERAGE NUMBER OF SHARES OUTSTANDING – Per | | |
| Consolidated Statement of Income (Loss) | 781,087 | 772,624 |
| (A) INCOME (LOSS) BEFORE EXTRAORDINARY ITEM – Per Consolidated Statement of Income (Loss) | \$ 31,082 | \$(485,796) |
| (B) EXTRAORDINARY ITEMS | \$ 20,000 | \$ 26,000 |
| EARNINGS PER SHARE – as Per Consolidated Statement of Income (Loss): | | |
| Income (Loss) before extraordinary items – line (A) | \$.04 | \$ (0.62) |
| Extraordinary items – line (B) | .02 | .03 |

- (1) The exercise price of these warrants at the beginning of 1973 approximates the average market value per share of common stock for those years.
- (2) Excluded due to the fact that inclusion would be anti-dilutive in a loss year.
- (3) The exercise price is higher than the average market per share of common stock.
- (4) The effect of converting the promissory notes to common stock is anti-dilutive and hence is omitted from calculations.

Barringer Research Inc. and Subsidiary

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

For the Year Ended December 31, 1974

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 company, Barringer Research Limited, a Canadian company ("Limited").

The Australian subsidiary, Barringer Geosurveys Pty. Limited, was sold on February 5, 1974. The results of its operations up to that date are included in the accompanying statements.

Investments in various wholly-owned inactive subsidiaries are recorded at nominal value and have not been consolidated.

(b) Principles of translation —

The accounts of the foreign subsidiary have been translated into United States dollars on the following basis:

- (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 \$27,249 has been included in accounts payable.

(c) Inventory policies and depreciation —

See notes 2 and 4 respectively.

(d) Amortization of Intangibles —

Patents and trademarks are amortized over their useful lives which range from five to seventeen years. Amortization amounted to \$7,466 in 1974 (1973 — \$7,266).

(e) Recognition of income and expense—

The company's research and development expenditures are primarily of a continuing nature and are written off as incurred.

Income from the sale of certain licence rights is being accounted for on a cash basis (refer to note 13).

(f) Maintenance and repairs —

Maintenance and repairs are charged to expense as incurred; renewals and betterments are capitalized, with adjustment made for the cost of property retired or replaced, less accumulated depreciation and salvage recovered.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

2. INVENTORIES

The major categories of inventories are as follows:

| | 1974 | 1973 |
|------------------------|----------------|----------------|
| | \$ | \$ |
| Finished goods | 88,007 | 462,476 |
| Work in progress | 166,795 | 134,803 |
| Materials and supplies | 23,403 | 9,571 |
| Contracts in progress | <u>225,792</u> | <u>109,234</u> |
| | <u>503,997</u> | <u>716,084</u> |

Finished goods and work in progress are stated at the lower of average cost and net realizable value. Materials and supplies are stated at the lower of average cost and replacement cost. The percentage-of-completion method of accruing profit on fixed price contracts in progress is used, with anticipated losses being provided for in full. Profits on cost plus contracts are recorded as earned.

3. INVESTMENTS AND ADVANCES

In 1972, the 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. The amount of such credit recorded in deferred income is \$240,133 (1973 - \$426,690).

These investments and advances are summarized as follows:

| | |
|---|----------------|
| (a) <i>Shares or interest recorded either at cost or equity and normal profit margin as applicable:</i> | \$ |
| Barringer Fiji Limited - 40 shares (a 10% interest) - no quoted value | 123,667 |
| Magenta Explorations Limited - 1,000,000 shares (a 22% interest) - no quoted value | 116,466 |
| Barringer Surveys Limited - 490 shares (a 49% interest) - no quoted value | 700 |
| Fiji Namosi Project - unincorporated (a 5% interest) | 242,171 |
| Minsearch Surveys Limited - 25,000 shares (a 50% interest and 49% voting right) - no quoted value | <u>500</u> |
| | <u>483,504</u> |
| (b) <i>Advances -</i> | |
| Magenta Explorations Limited (convertible into 230,000 shares) | 134,000 |
| Minsearch Surveys Limited (note 13) | <u>314,534</u> |
| | <u>448,534</u> |
| | <u>932,038</u> |

Advances to Magenta Exploration Limited have been written down to management's estimate of net realizable value. Exploration of the mining properties of these companies is continuing and management believes the results of certain of these exploration programmes warrant further participation.

In order to maintain the company's equity percentage in the Fiji Namosi Project, the company is required to make further advances of approximately \$150,000 in 1975. The company's contributions are 5% of the total expenditures on the programme. The extent of future costs of participation will be dependent on technical results obtained in 1975.

4. FIXED ASSETS

The major categories of fixed assets are as follows:

| | 1974 | 1973 |
|--------------------------------|------------------|------------------|
| | \$ | \$ |
| Office furniture and equipment | 115,854 | 117,916 |
| Plant and machinery | 361,853 | 340,155 |
| Exploration equipment | 354,708 | 537,448 |
| Equipment on lease | 318,120 | 326,877 |
| Leasehold improvements | 71,505 | 71,008 |
| | <u>1,222,040</u> | <u>1,393,404</u> |
| Accumulated depreciation | 803,105 | 716,666 |
| Net book value | <u>418,935</u> | <u>676,738</u> |

Depreciation is provided on the straight-line basis over the estimated useful lives of the assets, principally four to ten years. Leasehold improvements are being amortized over the terms of the company's leases, principally seven to twenty years. Depreciation and amortization for the year amounted to \$147,801 (1973 - \$174,088).

5. BANK INDEBTEDNESS

The bank indebtedness is collateralized by a general assignment of accounts receivable, an assignment of \$550,000 in licence monies being received from Minsearch Surveys Limited and a floating charge debenture on all the assets of the company. A portion (\$100,000) of the licence monies received in February 1975, was used to reduce bank indebtedness (see note 13).

The weighted average interest rate during the year was 9.95%, calculated by dividing the interest paid by the average borrowings. At year end, the average interest rate was 12%. The maximum and average short-term borrowings outstanding during the year were \$1,152,570 and \$814,564 respectively.

6. LONG-TERM DEBT

The convertible subordinated promissory notes mature serially in semi-annual instalments of \$30,000 to December 31, 1978 with the final payment on that date being \$35,000. Interest is payable at fluctuating rates, the rate as at December 31, 1974 being 10.5% 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.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

7. COMMON STOCK AND PAID IN SURPLUS

| | Common Stock | | Paid in Surplus | |
|--|--------------|--------------|------------------|------------------|
| | 1974 | 1973 | 1974 | 1973 |
| | \$ | \$ | \$ | \$ |
| Balance — beginning of year | 8,674 | 8,550 | 1,874,288 | 1,821,612 |
| 10,000 shares issued to an officer of a subsidiary company for a patent valued at \$48,000 | — | 100 | — | 47,900 |
| 2,400 shares issued on exercise of stock option for consideration of \$4,800 (note 8(a)) | — | 24 | — | 4,776 |
| 2,000 shares of treasury stock issued for services rendered in the amount of \$2,000 | — | — | 1,855 | — |
| Balance — end of year | <u>8,674</u> | <u>8,674</u> | <u>1,876,143</u> | <u>1,874,288</u> |

The excess of the consideration received on issue of the treasury stock over the average cost thereof has been credited to paid in surplus.

Shares of common stock reserved for issuance were as follows:

| | 1974 | 1973 |
|---------------------------------------|----------------|----------------|
| For stock options — | | |
| Options outstanding | 124,900 | 149,500 |
| Available for granting future options | 51,100 | 26,500 |
| For warrants | 11,000 | 11,000 |
| For conversion of promissory notes | 12,250 | 15,250 |
| | <u>199,250</u> | <u>202,250</u> |

8. STOCK OPTIONS AND WARRANTS

(a) 1968 Qualified Stock Option Plan

In 1968 the company adopted the 1968 Qualified Stock Option Plan covering 30,000 shares of common stock of the company. Options may be granted to 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 employee remains in the continuous employ of the company or a subsidiary, and expires five years from the date of the grant. Information with respect to this Stock Option Plan is summarized as follows:

| | Shares | Amount \$ |
|--|-----------------|-----------------|
| Options granted subsequent to 1968 and outstanding at December 31, 1972 (\$2.00 to \$8.00 per share) | 29,500 | 136,762 |
| Changes during 1973 — | | |
| Options exercised (\$2.00 per share) | (600) | (1,200) |
| Options cancelled and expired | <u>(10,350)</u> | <u>(54,212)</u> |
| Options outstanding at December 31, 1973 (\$2.00 to \$8.00 per share) | 18,550 | 81,350 |
| Changes during 1974 — | | |
| Options cancelled and expired | <u>(5,350)</u> | <u>(29,400)</u> |
| Options outstanding at December 31, 1974 (\$2.00 to \$5.50 per share) | <u>13,200</u> | <u>51,950</u> |

(b) 1970 Qualified Stock Option Plan

On May 13, 1970 the company adopted the 1970 Qualified Stock Option Plan covering 30,000 shares of common stock of the company. Options may be granted to directors, officers and other 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, provided 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. No optionee may exercise an option while there is outstanding any other stock option previously granted to the optionee. Information with respect to this Stock Option Plan is summarized as follows:

| | Shares | Amount \$ |
|---|----------------|-----------------|
| Options granted in 1970, or subsequent, outstanding at December 31, 1972 (\$2.00 to \$3.00 per share) | 18,650 | 46,300 |
| Changes during 1973 – Options exercised (\$2.00 per share) | <u>(1,800)</u> | <u>(3,600)</u> |
| Options outstanding at December 31, 1973 (\$2.00 to \$3.00 per share) | 16,850 | 42,700 |
| Changes during 1974 – Options cancelled | <u>(4,150)</u> | <u>(11,300)</u> |
| Options outstanding at December 31, 1974 (\$2.00 to \$3.00 per share) | <u>12,700</u> | <u>31,400</u> |

(c) Unqualified Stock Option Plan

In 1972 the company adopted an unqualified Stock Option Plan and options covering 95,000 shares were granted to fourteen key employees at an option and market value price of \$5.00 and \$5.50 per share. These options are exercisable after December 31, 1974 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, 1974, these options have not been exercised and 78,000 options for shares are outstanding.

(d) 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 an option and market value price of \$5.00 per share during the period from October 1, 1972 to September 30, 1977. As at December 31, 1974, these options have not been exercised, and are outstanding.

In 1973 the company granted, to an officer of the company, an option to purchase 11,000 shares at an option and market value price of \$2.50 per share.

(e) Warrants

There were 11,000 warrants exercisable to March 31, 1975 to purchase 11,000 shares of common stock of the company at \$7.50 per share.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

9. INCOME TAXES

(a) United States income taxes —

Income taxes in the amount of \$10,000 have been recovered on application of the company's current losses of \$23,000.

(b) Canadian income taxes —

Income taxes otherwise payable during the year of approximately \$260,000 were eliminated by claiming prior years' tax losses and excess depreciation for tax purposes.

As at December 31, 1974, the company had certain timing differences of approximately \$435,000 which are available to reduce future years' taxable income.

Utilization of the timing differences is dependent upon the company, and in particular, certain of the joint ventures attaining profitable operations in the future, and upon disposition of certain of the company's investments.

As at December 31, 1974, the company has recorded in the accounts depreciation and amortization of \$968,845 in excess of that available to be claimed for tax purposes.

10. COMMITMENTS AND CONTINGENT LIABILITY

(a) Contingent liability —

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 \$8,455 has been repaid to date. Such repayments are an element of cost of sales.

(b) Rental expense and lease commitments —

(i) Rental and lease expenses for the year amounted to \$82,030 (1973 — \$50,717).

(ii) Lease commitments on rented premises are as follows:

| Year | Rental cost |
|-----------------------------------|-------------|
| | \$ |
| 1975-1979 — annual rental cost | 40,570 |
| 1980-1984 — aggregate rental cost | 103,850 |
| 1985-1987 — aggregate rental cost | 29,310 |

(iii) Equipment and automobile lease commitments total \$40,800 in each of the next three years.

11. PENSION PLAN

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 plan was \$25,768 in 1974 (1973 — \$21,297). Pension costs are funded, and there was no unfunded liability as at December 31, 1974.

12. EARNINGS (LOSS) PER SHARE

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

13. JOINT VENTURE AGREEMENT

In 1974 Barringer formed a joint venture airborne survey company, Minsearch Surveys Limited ("Minsearch"), with the Canadian subsidiary of a major international mining and mine-financing company. Barringer granted Minsearch licence and know-how rights to use the Barringer-developed and patented AIRTRACE system for mineral exploration on a worldwide basis subject to certain limitations imposed by prior agreement between Barringer and third parties. Barringer's ownership in Minsearch is 50%, and Barringer has a 49% voting position in the company.

The licence and know-how rights were granted for a consideration of \$1,800,000 of which \$1,100,000 is to be advanced in cash in instalments over a two year period. The remaining \$700,000 is due to Barringer out of the net cash flows of Minsearch, and will be used to repay obligations assumed by Minsearch from Barringer that are discussed in subsequent paragraphs of this note. Barringer received \$550,000 in 1974 and will receive \$500,000 in 1975, in two equal instalments of \$250,000. The first instalment was received in February 1975, and was used to reduce Barringer's bank indebtedness by \$100,000 (see note 5), and retire the \$150,000 of advances to an associated company showing as a current liability on the company's balance sheet as at December 31, 1974. The final licence payment of \$50,000 is due in February, 1976. The payments are to be funded by Barringer's partner in Minsearch who has the right under certain conditions to terminate the agreement at any time without penalty. Accordingly, Barringer is accounting for its share of income from Minsearch on a cash basis. In the event the contract is so terminated, Barringer may purchase Minsearch's assets for a nominal amount.

In addition, the agreement provides for Minsearch to purchase certain equipment from Barringer and to fund continuation of a research and development programme related to this equipment. The research and development programme, in the main, is being performed by Barringer. Because of its ownership position in Minsearch, Barringer is accounting for its fee on performance of this work by taking 50% of the fee margin into income and crediting deferred income with the remaining 50%. The licence payments are being treated in a similar manner. At December 31, 1974 the amount pertaining to Minsearch included in deferred income was \$319,353.

Under the terms of the agreement the shares of Barringer's wholly-owned Australian subsidiary, Barringer Geosurveys Pty., Limited ("BGS") were transferred to Minsearch. Barringer recorded a realized gain on the sale of BGS to Minsearch of \$112,897. Under the terms of the agreement, Minsearch obligated itself to repay BGS's debt of \$387,625 to BRL from its future cash flows. BGS is inactive at the present time.

Minsearch will also compensate Barringer out of its net cash flow, when realized, an amount of \$314,534 for certain airborne survey equipment provided Minsearch at the time of that company's formation.

14. COMPARATIVE FIGURES

The prior years' comparative figures have been reclassified to conform to the 1974 presentation.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

15. FINANCIAL POSITION AND OPERATIONS OF THE PARENT COMPANY –
BARRINGER RESEARCH INC.

Balance Sheet as at December 31, 1974 and 1973

| ASSETS | 1974 | 1973 |
|---|------------------|------------------|
| | \$ | \$ |
| Current assets – | | |
| Cash | 3,552 | 4,723 |
| Income taxes recoverable | 10,000 | – |
| Due from subsidiary company | 32,350 | 70,081 |
| Due from associated company | 11,988 | 11,988 |
| | <u>57,890</u> | <u>86,792</u> |
| Investments and advances – | | |
| Investment in subsidiary company | 798,449 | 798,449 |
| Advances to subsidiary company | 998,526 | 1,075,000 |
| | <u>1,796,975</u> | <u>1,873,449</u> |
| | <u>1,854,865</u> | <u>1,960,241</u> |
| Liabilities | | |
| Current liabilities – | | |
| Accounts payable and accrued charges | 9,938 | 26,046 |
| Income taxes payable | – | 18,000 |
| Current portion of long-term debt | 60,000 | 60,000 |
| | <u>69,938</u> | <u>104,046</u> |
| Long-term debt – convertible subordinated promissory notes, less amounts included in current liabilities | 185,000 | 245,000 |
| | <u>254,938</u> | <u>349,046</u> |
| Shareholders' Equity | | |
| Capital stock – | | |
| Authorized – | | |
| 2,000,000 shares of common stock of 1¢ par value each | | |
| Issued and fully paid – 867,400 shares | 8,674 | 8,674 |
| Paid-in surplus | 1,876,143 | 1,874,288 |
| Deficit | (278,488) | (265,220) |
| | <u>1,606,329</u> | <u>1,617,742</u> |
| Less: Common stock in treasury – at cost, 88,400 shares (1973 – 90,400) | 6,402 | 6,547 |
| | <u>1,599,927</u> | <u>1,611,195</u> |
| | <u>1,854,865</u> | <u>1,960,241</u> |

Statement of Earnings (Loss) and Deficit

For the Years Ended December 31, 1974 and 1973

| | 1974 | 1973 |
|--|-----------------------|-----------------------|
| | \$ | \$ |
| Interest earned | 43,000 | 43,000 |
| General and administrative expenses | <u>26,687</u> | <u>40,755</u> |
| | <u>16,313</u> | <u>2,245</u> |
| Other expenses – | | |
| Interest on long-term debt | 33,131 | 30,552 |
| Withholding taxes | <u>6,450</u> | <u>6,450</u> |
| | <u>39,581</u> | <u>37,002</u> |
| Loss before income taxes and extraordinary item | 23,268 | 34,757 |
| Income taxes recovered (note 9) | <u>10,000</u> | <u>11,000</u> |
| Loss before extraordinary item | 13,268 | 23,757 |
| Extraordinary item – | | |
| Gain on sale of investment in non-associated company, less income taxes | <u>–</u> | <u>26,000</u> |
| Net earnings (loss) for the year | (13,268) | 2,243 |
| Deficit – beginning of year | <u>265,220</u> | <u>267,463</u> |
| Deficit – end of year | <u><u>278,488</u></u> | <u><u>265,220</u></u> |

SCHEDULE III

Barringer Research Inc. and Consolidated Subsidiary

INVESTMENTS

For the Year Ended December 31, 1974

| Name of Issuer and Descriptions of Investment | Balance at Dec. 31/73 | | Additions During Year | | Deductions During Year | | Balance at Dec. 31/74 | |
|--|--------------------------|------------------|--------------------------|------------------|---------------------------|------------------|--------------------------|------------------|
| | Number of Shares | Dollars | Number of Shares | Dollars | Number of Shares | Dollars | Number of Shares | Dollars |
| Barringer Fiji Limited — common stock | 40 | \$123,717 | — | — | — | \$50 | 40 | \$123,667 |
| Magenta Explorations Limited — common stock | 1,000,000 | \$303,023 | — | — | — | 186,557 | 1,000,000 | 116,466 |
| Royex Mining Limited — common stock | 107,914 | — | — | — | — | — | 107,914 | — |
| Barringer Surveys Limited — common stock | 490 | 700 | — | — | — | — | 490 | 700 |
| Namosi Project — Fiji — 5% interest | — | 50,000 | — | 192,171 | — | — | — | 242,171 |
| Magenta Explorations Limited — advance | — | 297,000 | — | 48,487 | — | 211,487 | — | 134,000 |
| Minsearch Surveys Limited — common stock | — | — | 25,000 | 500 | — | — | 25,000 | 500 |
| Minsearch Surveys Limited — advances | — | — | — | 314,534 | — | — | — | 314,534 |
| Totals | — | <u>\$774,440</u> | — | <u>\$555,692</u> | — | <u>\$398,094</u> | — | <u>\$932,038</u> |

SCHEDULE V

Barringer Research Inc. and Consolidated Subsidiary

FIXED ASSETS

For the Two Years Ended December 31, 1974

| Classification | Balance at Beginning of Year | Additions at Cost | Retirements or Sales | Balance at Close of Year |
|--------------------------------|------------------------------------|----------------------|-------------------------|--------------------------------|
| YEAR ENDED DECEMBER 31, 1973: | | | | |
| Office Furniture and Equipment | \$ 113,187 | \$ 4,729 | — | \$ 117,916 |
| Plant and Machinery | 788,728 | 87,756 | 536,329 (1) | 340,155 |
| Exploration Equipment | 476,525 | 60,923 | — | 537,448 |
| Equipment for Lease | 177,022 | 149,855 | — | 326,877 |
| Leasehold Improvement | 60,852 | 10,156 | — | 71,008 |
| Total | <u>\$1,616,314</u> | <u>\$ 313,419</u> | <u>\$ 536,329</u> | <u>\$1,393,404</u> |
| YEAR ENDED DECEMBER 31, 1974: | | | | |
| Office Furniture and Equipment | \$ 177,916 | \$ 2,243 | \$ 4,305 (2) | \$ 115,854 |
| Plant and Machinery | 340,155 | 21,698 | — | 361,853 |
| Exploration Equipment | 537,448 | 24,470 | 207,210 (2) | 354,708 |
| Equipment for Lease | 326,877 | — | 8,757 | 318,120 |
| Leasehold Improvement | 71,008 | 927 | 430 (2) | 71,505 |
| Total | <u>\$1,393,404</u> | <u>\$ 49,338</u> | <u>\$ 220,702</u> | <u>\$1,222,040</u> |

(1) Reclassified as inventory

(2) Relates to disposal of BGS Pty. Limited

SCHEDULE VI

Barringer Research Inc. and Consolidated Subsidiary

ACCUMULATED DEPRECIATION AND AMORTIZATION OF FIXED ASSETS

For the Two Years Ended December 31, 1974

| Classification | Balance at Beginning of Year | Charged to Costs and Expenses | Retirements, Renewals, and Replacements | Balance at Close of Year |
|--------------------------------|------------------------------------|--|--|--------------------------------|
| YEAR ENDED DECEMBER 31, 1973: | | | | |
| (Reclassified) | | | | |
| Office Furniture and Equipment | \$ 52,699 | \$ 10,863 | — | \$ 63,562 |
| Plant & Machinery | 293,810 | 40,171 | 116,291 | 217,690 |
| Exploration Equipment | 67,256 | 93,193 | (112,535) | 272,984 |
| Equipment for Lease | 124,041 | 15,706 | — | 139,747 |
| Leasehold Improvement | 8,528 | 14,155 | — | 22,683 |
| Total | <u>\$ 546,334</u> | <u>\$ 174,088</u> | <u>\$ 3,756</u> | <u>\$ 716,666</u> |
| YEAR ENDED DECEMBER 31, 1974: | | | | |
| Office Furniture and Equipment | \$ 63,562 | \$ 11,463 | \$ 4,162 (1) | \$ 70,863 |
| Plant and Machinery | 217,690 | 37,343 | — | 255,033 |
| Exploration Equipment | 272,984 | 46,388 | 50,440 (1) | 268,932 |
| Equipment for Lease | 139,747 | 46,162 | — | 185,909 |
| Leasehold Improvement | 22,683 | 6,445 | 6,760 | 22,368 |
| Total | <u>\$ 716,666</u> | <u>\$ 147,801</u> | <u>\$ 61,362</u> | <u>\$ 803,105</u> |

(1) Relates to sale of BGS Pty. Limited

SCHEDULE XII
Barringer Research Inc. and Consolidated Subsidiary

RESERVES

For the Two Years Ended December 31, 1974

| Description | Balance at Beginning of Year | Additions | Deductions from Reserves Amount | Balance at Close of Year |
|---|------------------------------------|------------|---------------------------------------|--------------------------------|
| RESERVES DEDUCTED FROM ASSETS TO WHICH THEY APPLY: | | | | |
| Allowance for doubtful accounts: | | | | |
| Year ended December 31, 1973 | 56,168 | 5,695 (1) | 28,567 (2) | 33,296 |
| Year ended December 31, 1974 | 33,296 | 13,500 (1) | 18,419 (2) | 28,377 |
| DEFERRED INCOME: | | | | |
| Year ended December 31, 1973 | \$ 426,690 | \$ 37,500 | — | \$ 464,190 |
| Year ended December 31, 1974 | 464,190 | 432,200 | 186,557 (3) | \$ 709,833 |

(1) Charged to costs and expenses

(2) Uncollectible accounts written off

(3) Write-down of approximately 60 percent of the value of Magenta investment carried in account

SCHEDULE XVI
Barringer Research Inc. and Consolidated Subsidiary

SUPPLEMENTARY INCOME STATEMENT INFORMATION

For the Two Years Ended December 31, 1974

| | 1973 | 1974 |
|-------------------------|-----------|-----------|
| MAINTENANCE AND REPAIRS | \$ 36,319 | \$ 23,763 |
| AIRCRAFT RENTAL | 90,926 | — |
| ROYALTIES | 50,732 | 78,994 |

All of the above amounts were charged to cost of sales or operating expenses.

OPINION OF INDEPENDENT PUBLIC ACCOUNTANTS

COOPERS & LYBRAND

CHARTERED ACCOUNTANTS

TELEPHONE (416) 869-1130

CABLES COLYBRAND

TELEX 06-23590

145 KING STREET WEST

TORONTO, ONTARIO, CANADA M5H 1V8

OFFICES THROUGHOUT CANADA
AND IN PRINCIPAL AREAS
OF THE WORLD

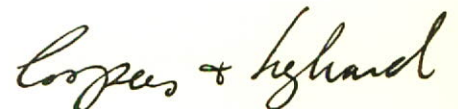
To the Shareholders
Barringer Research Inc.

We have examined the consolidated financial statements and schedules of Barringer Research Inc. and its subsidiary which are being filed as part of the Annual Report (Form 10K) to the Securities and Exchange Commission for the year ended December 31, 1974. 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 previously examined and reported upon the consolidated financial statements and schedules of the company for 1973.

The company has made advances to Barringer Geosurveys Pty. Limited of \$387,625 and to Minsearch Surveys Limited of \$314,534 which are to be repaid from the cash flow of Minsearch Surveys Limited (note 13). In addition, the company has advanced \$134,000 to Magenta Explorations Limited (note 3).

In our opinion:

- (a) Subject to the realization of the advances of \$836,159 referred to above, these financial statements present fairly the financial position of the companies as at December 31, 1974 and 1973, and the results of their operations and the changes in their financial position for the years then ended, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.
- (b) The accompanying schedules as at December 31, 1974 and 1973 present fairly the information required to be set forth therein, in conformity with generally accepted accounting principles applied on a basis consistent with that of the preceding year.



CHARTERED ACCOUNTANTS

Toronto, Ontario, Canada,
February 21, 1975.



