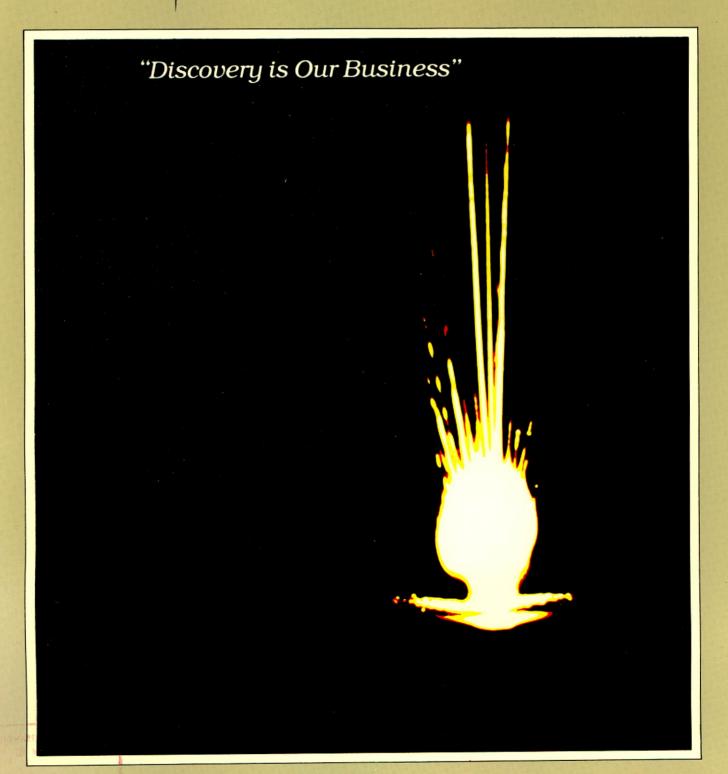
## BARRINGER RESOURCES INC.



1981 ANNUAL REPORT

# BARRINGER RESOURCES INC.

Corporate Profile: A worldwide exploration and research company, Barringer uses a wide range of its own advanced techniques and instruments to explore and develop oil and gas and mineral prospects. The Company's research and development efforts in electro-optics, electromagnetics, magnetic and atmospheric physics have resulted in patented and proprietary instruments, instrument systems and techniques used in airborne and ground exploration, environmental monitoring, process control and metal detection. The Company also provides minerals exploration and analytical services including airborne and ground surveys, data compilation; geochemical, geological, geophysical and exploration management consultation, geochemical and multi-element analysis and assaying.



Areas of Activity: Barringer conducted operations in many parts of the world during 1981 as highlighted on the above map. Oil and gas exploration was conducted principally in the United States with extensive surveys in Colorado, Kansas, Oklahoma, Nebraska, Arizona, Kentucky and Texas. Important advances on the Company's TIVAC system of advanced oil and gas exploration and technology were made in the Company's Canadian facilities. In addition, mineral surveys were conducted in the United States, Canada and South Africa. As in prior years, the Company continued to sell its manufactured products throughout the United States, Canada and Europe.



Cover Photograph: Vaporization of a mineral soil sample off adhesive tape in the LASERTRACE® system.

## Report to Shareholders

The year 1981 was a watershed year for Barringer Resources Inc. Great strides were accomplished in advancing our hydrocarbon exploration system, and significant exploration efforts were initiated. During July, we were successful in a \$5 million underwriting of convertible subordinated debentures which repaid certain bank borrowings and provides significant capital for our continued hydrocarbon development exploration efforts as well as new product and minerals exploration systems development. Through the end of 1981, approximately \$3.2 million of these proceeds have been expended. The balance of the proceeds is being held in short-term investments of high quality until required.

Financially, we experienced a significant loss, but \$663,000 of our operating loss represented a sizeable investment in the future of your Company to research and further develop techniques, interpretive methods and instruments to explore for oil and gas and minerals, and to develop new commercial products for manufacture and sale. In addition, \$375,000 was expended for oil and gas exploration surveys on properties in which Barringer elected not to acquire an interest.

The activities in your Company are broadly divided into oil and gas exploration, research and development, instrument manufacture and minerals activities. In the following paragraphs, I will discuss each major activity individually.

#### Oil and Gas Exploration

During 1981, significant advances were made in developing our oil and gas exploration technology. Several major programs were initiated involving thousands of



Reviewing well logs of the Morgan #2A-27, a Kansas well in which Barringer has a 25% working interest. The well was in process at March 24, 1982.



Dr. Anthony R. Barringer, President and Chairman of the Board.

wildcat acres. By the end of 1981, Barringer had several highly promising exploration programs in development. At the same time, we adopted the strategy of investing significantly less of our own monies in new exploration programs, instead earning carried interests in the properties by virtue of your Company's unique technologies which no one else can offer to the oil and gas exploration industry.



Discussing geochemical results of a hydrocarbon research program on 10 seismic targets in Kansas.

One comment about the recent decline in oil and gas prices. Our belief is that such declines, together with the continuing high rates of interest facing exploration companies, should increase excitement in our unique hydrocarbon exploration technologies since they are far less expensive than conventional technologies, require much less time and, in general, allow us to offer industry a highly cost-effective means of skimming their large acreage positions for choice acreage. Accordingly, we believe our prospects for active involvement in profitable joint ventures with oil and gas exploration companies are promising.

Overseas, we are negotiating opportunities to develop joint venture approaches with major organizations in exploring wildcat acreage throughout the world.

#### Research and Development

We have made major strides in our joint program with a major oil company in the continuing development of an airborne system for oil and gas exploration. This system, an outgrowth of geophysical concepts developed by your Company in the minerals exploration field, is currently being tested in ground prototype versions and shows promise of fulfilling the expectations which we originally set forth for it some two years ago.

Certain equipment based on our proprietary design was included as one of only seven experiments carried aboard the recent second flight of the United States space shuttle Columbia to monitor for the first time the global distribution of the toxic gas, carbon monoxide.



The INPUT system recently installed aboard a helicopter by Questor Surveys Ltd., a Barringer licensee.

#### Instrument Manufacture

We continue to manufacture a number of hightechnology instruments from magnetics to our new Hand Held Ratioing Radiometer, with end markets in the exploration community and testing segments of other industries.

During 1981, our efforts were concentrated on identifying product opportunities where our existing and developing technologies could generate significant future revenues for your Company. This effort is continuing during 1982.

#### Minerals Activities

We are continuing to advance the development of our mining technology, although on a lower level given our current interest in hydrocarbon exploration. However, our efforts in oil and gas research have yielded new information which has enabled us to explore for deeper deposits of certain minerals heretofore unreachable.

During the past year, we took significant steps to improve the profitability of our laboratory operations, including closing the unprofitable Whitehorse laboratory and implementing new computer techniques for data interpretation and compilation. Marketing efforts relating to the four remaining labs in Toronto, Calgary, Denver and Reno were expanded.

Despite the mining industry's decrease in exploration activities due to the current depressed state of prices for many metals and minerals, our analytical laboratory group is profitable. We are continuing to expand our capabilities in environmental analysis, and this continues to be a promising area of development.

#### Summary

While we had a loss in 1981, we ended the year with the capital needed to carry out the research and development that we believe will be necessary to continue development of Barringer in 1982. We have taken significant steps to strengthen our accounting procedures, upgrade the management of our operations and improve earnings of your Company. However, our major thrust continues to be in hydrocarbon exploration and development, and we expect to be measured increasingly by the additions to our underlying asset value made through the utilization of exploration technology, as well as by the contributions made by our manufacturing and research and development efforts.

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Dr. Anthony R. Barringer, President and Chairman of the Board

March 24, 1982

#### **Current Activities**

Barringer Resources Inc. was founded in 1961 primarily to develop new exploration systems for mineral resources based on the integration of multiple scientific disciplines. Its staff of scientists and engineers covers the fields of geology, geochemistry, electromagnetics, electro-optics, analytical chemistry and instrumentation design.

This unique concept of integration of diverse disciplines has enabled the Company to develop a wide range of advanced electromagnetic and electro-optical systems, as well as specialized analytical support services, that have applications in oil and gas and other minerals exploration and environmental sciences. Barringer has also developed numerous airborne devices for survey operations as well as optical systems for remote detection of gases by means of their spectral signatures.

The Company has 37 United States patents relating to its equipment and systems. An aggregate of 232 patents and patent applications have been issued or are pending in countries other than the United States. Although Barringer 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.

While the Company's operations are not necessarily seasonal, the months of December to March historically represent a slower period of operations due, in part, to reduced minerals activities in northern areas.

As of December 31, 1981, there were 172 persons, including officers, employed by the Company.

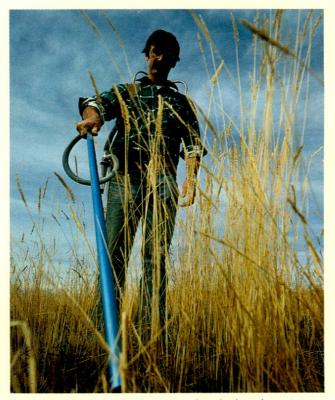
#### Oil and Gas Exploration

Drawing on its experience and expertise in mineral exploration technology, Barringer recently has developed new and improved methods of exploring for oil and gas. The Company's knowledge in the field of remote sensing has been coupled with its expertise in analytical technology and a broad multi-level and multi-discipline approach to oil and gas exploration has been developed. The Company believes that, while conventional geological and seismic methods are important exploration tools, the effectiveness of such methods can be enhanced when used in conjunction with the Company's new and non-conventional methods for both rapid reconnaissance and detailed exploration.



Using its techniques, Barringer conducts exploration programs over undeveloped oil and gas properties which are generally owned by others to identify specific prospect areas that have the potential for oil and gas production. The Company then seeks to acquire an interest in the oil and gas properties upon interpreting the results of its exploration program.

Certain of these exploration programs are also conducted under the terms of various agreements whereby the Company has the right to earn an interest in the related oil and gas properties under certain conditions, generally upon the successful drilling of oil and gas wells. As of December 31, 1981, Barringer was still in the early stages of acquiring and earning interests in oil and gas properties and consequently had no proved oil and gas reserves.



Taking surface samples from geochemical analyses to identify the presence of hydrocarbons.

## Plotting the computer interpretation of hydrocarbon soil sample analyses.

The following table sets forth the Company's interests in undeveloped oil and gas properties as of December 31, 1981:

State	Gross	Net
Arizona	370,011	185,005
Colorado	7,197	2,941
Nebraska	70,000	1,400
Wyoming	9,411	9,411
Total	456,619	198,757

The Company was also conducting an exploration program over approximately 40,000 acres in Kansas under a joint venture arrangement whereby the joint venture partners intend to acquire interests in such oil and gas properties by drilling exploratory wells. All exploration costs are shared equally by the joint venture partners. As of March 10, 1982, two wells were drilled under the terms of this agreement. One well was plugged and abandoned whereas the other was still in progress.

In addition, the Company was conducting exploration programs over approximately 108,000 gross acres in Kansas, 40,000 gross acres in Nebraska, 10,000 gross acres in Montana and 2,300 gross acres in Kentucky all under various agreements with third parties. Through such agreements, the Company can earn carried working interests ranging from 2.5% to 12.5% before payout. If the programs are successful, the working interest will be increased to 15% to 20% after payout. The Company is under no financial obligations under its agreements, except those pertaining to its working interest obligations in any producing wells.

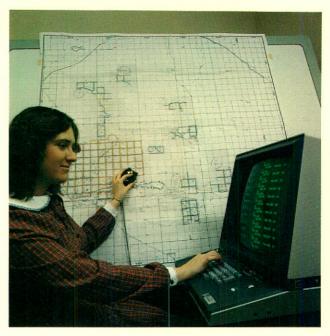
The following table covering the three years ended December 31, 1981 sets forth amounts expended, whether capitalized or expensed, in the Company's oil and gas activities:

		n .	~
Years	Ended	December	31

	1981	1980	1979
Exploration Expense* Interest in Potential Oil	\$ 375,000	\$142,000	\$ 92,000
and Gas Properties	316,000	213,000	_
Research and Development	288,000	332,000	168,000
Purchase of Fixed Assets	115,000	32,000	62,000
	\$1,094,000	\$719,000	\$322,000

\*Reflects costs in areas not presently being explored by the Company, and therefore expensed for financial statement purposes.

The Company is a relatively new entrant in the field of oil and gas exploration and its techniques and methodologies are proprietary and different from conventional



approaches. Other systems and techniques for oil and gas exploration are well-established and there are numerous companies and individuals competing for desirable leases and drilling equipment. Many of the companies engaged in oil and gas exploration possess larger technical staffs, greater financial resources and more experience than Barringer, although not necessarily using the same type of technology.

#### Research and Development

Barringer undertakes projects that may lead to the development of patented or proprietary products or services. Such projects generally include conceptual development, design engineering and construction of prototype instruments and systems. Funding usually comes from third parties, primarily from mining and oil companies as well as governmental agencies.



Testing the new potash ore analyzer developed for Saskatchewan Potash Corporation.

Designing a high-powered transmitter to improve the capability of the INPUT system, which is licensed to Geoterrex Ltd. and Questor Surveys Ltd.

Research and development contracts are generally entered into on a cost reimbursement plus fee basis.

The Company's research and development efforts have resulted in patented and proprietary instruments, instrument systems and techniques in the fields of airborne and ground exploration, environmental monitoring, process control and metal detection. These instruments, systems and techniques are sold (see "Manufacture and Sale of Instruments") or licensed or leased to others and used directly by the Company in providing services to others (see "Oil and Gas Exploration" and "Minerals — Systems Licensing, Analytical Services and Exploration").

Significant research and development projects currently underway include the following:

The COTRAN® (COrrelation of TRANsients) system is a new electromagnetic mineral prospecting system that has been in development for several years. The system uses pulses carrying a broad band of frequencies, sophisticated digital signal processing techniques with airborne computer analysis of data which the Company believes will provide substantial advantages in terms of sensitivity and interpretability. Since the system is new and has not yet been tested in large-scale operational service, its commercial impact has not yet been fully evaluated.

The TIVAC™ system, currently under development, is an airborne electromagnetic system designed for oil and gas exploration. It is based on the use of geophysical remote sensing methods to detect hydrocarbon leakage over oil and gas deposits associated with certain types of geological conditions. Tests have yielded encouraging results and analyses of field data appear to indicate a valid theoretical basis for the system. Nevertheless, the commercial potential of the system can be judged only after considerable additional research and field evaluation.

The Company expects that the complete cost of the TIVAC system will be funded by a \$750,000 (Canadian) three year grant awarded to the Company in April 1980 by the National Research Council of Canada ("NRC") and by an agreement dated September 30, 1980, between the Company and Petro-Canada Exploration Inc. ("PEX"), a wholly owned subsidiary of Canada's national oil company, Petro-Canada.

In order to earn a license for the TIVAC system, PEX must fund at least \$3 million (Canadian) for its development. The license will be exclusive,



royalty-free and non-transferable, and include knowhow and patents developed in the program for hydrocarbon exploration in Canada. The license will be non-exclusive outside of Canada and subject to the Company's rights which allow Barringer to use the system anywhere and to license it to interests outside of Canada. PEX may terminate the agreement at any time with 60 days' notice to the Company that it will make no payments beyond the completion of the then-current stage of the program, which payments shall not exceed \$250,000 (Canadian). The Company has the option, exercisable within five years of the date of the agreement, to purchase all such property, including the experimental TIVAC system, for a price equal to one-half of PEX's depreciated book value.



Interpreting data obtained from test flights of Barringer's COTRAN system.

In the event that PEX funds up to a total of \$3 million (Canadian) toward the development of the experimental TIVAC system and the system is

Product engineering, an integral part of the Canadian-based manufacturing operation.

developed to the point that it is operational, PEX may direct the Company to manufacture and install an operational TIVAC system in an aircraft, subject to PEX's making additional payments to the Company estimated at approximately \$220,000 (Canadian). Barringer will have the first priority to use the system if the system is not being used by PEX. Should the Company manufacture and assemble its own operational TIVAC system, PEX will have the first priority to use it providing neither the Company or its designees are using that particular system.

Barringer retains exclusive rights to any mineral applications for the TIVAC technology and is entitled to an interest in any metalliferous deposits discovered by PEX's use of the system equal to 2% of PEX's net smelter return from any such deposit. PEX's license is limited to use by PEX in ventures in which it is the operator or has a bona fide interest as an explorer and is not acting as a survey contractor for third parties. The Company's use of the system is similarly restricted in Canada.

Barringer has developed a remote sensing gas filter cell spectrometer — GASPEC® — which NASA Langley Research Center has used successfully in flight tests to monitor atmospheric carbon monoxide. This equipment was incorporated as one of the seven experiments selected for the second flight of the United States space shuttle Columbia to carry on-board experiments. The experiment is based on the Company's proprietary design and the space flight hardware was constructed by TRW Systems Group. For the first time, sensors monitored the global distribution of carbon monoxide at different atmosphere altitudes. Information from the experiment will be used to study the dispersion and dissipation of the gas. It will also test the feasibility of monitoring seasonal variations and hemispheric exchanges from satellites.

While there are no companies that, to the knowledge of Barringer, compete directly with it in the earth sciences field with instrumentation similar to the patented systems of the Company, other companies have other geophysical techniques that are competitive in the mineral and oil and gas exploration markets.

As of December 31, 1981, the Company had a backlog of \$1,855,000 of work on hand. It is estimated that \$1,760,000 of the backlog will be completed by December 31, 1982, the balance representing programs continuing beyond that date.



#### Manufacture and Sale of Instruments

For many years Barringer has been involved in the manufacture and sale of certain geophysical instruments and environmental and process monitoring instruments which have been derived from the Company's research programs. As a result of the continued growth in the volume of manufacturing, 13,000 square feet of space have been added to the Toronto facility during 1981.

Products are marketed in the United States and Canada and through sales representatives in various parts of the world. The Company's products include the following:

A well-established line of ground and oceanographic magnetometers which measure the earth's total magnetic field intensity.

COSPEC® (COrrelation SPECtrometer) spectrometers, the only commercially available remote sensing devices for the monitoring of atmospheric concentrations of sulphur dioxide and nitrogen dioxide.

REFSPEC™ (REFlectance SPECtrometer) spectrometer, a prototype recently developed to measure spectral reflectance characteristics of vegetation, soils and rocks under daylight conditions.

A Hand Held Ratioing Radiometer, an electro-optical device for measuring the reflectance ratios of pairs of wave-lengths in the visible and infrared spectral regions.

A range of on-stream analyzers for detecting leakage and monitoring the quality of heavy water being circulated in the Canadian form of nuclear reactor, the CANDU reactor; sales of heavy water monitors are dependent upon new installations of CANDU reactors, which the Company expects to decline.



Custom designing equipment in the Company's machine shop in Toronto.

There are other companies engaged in the manufacture of geophysical instruments that compete with the various instruments manufactured by the Company. Although there are other pollution monitoring devices available on the market which compete with the Company's instruments, such instruments do not provide the advantages available by use of the Company's patented electro-optical methods. The Company is not, however, a major manufacturer of pollution monitoring devices.

The items purchased by the Company for assembly of its manufactured products are of a standardized nature and are available from numerous sources. The Company has no long-term agreement for any of the items purchased by it and, apart from periodic delays in the delivery of some components, the Company does not anticipate any problem in obtaining the necessary materials or parts for manufacture of the equipment it produces.

As of December 31, 1981, the Company had a backlog of \$164,000 of work on hand. It is estimated that all such backlog will be completed by December 31, 1982.

## Minerals — Systems Licensing, Analytical Services and Exploration

A portion of Barringer's income comes from the licensing and leasing of some of the patents and systems developed in the Company's research programs.

The INPUT® (INduced PUIse Transient) system was the original development of the Company and is the only commercial airborne electromagnetic mineral prospecting system to use a pulsed field principle. The system has been successful in its application in the

search for mineral deposits. INPUT is licensed on an exclusive basis to Geoterrex Ltd. of Ottawa and Questor Surveys Ltd. of Toronto, and is used worldwide for mineral surveys. A royalty is paid for every line mile of production survey carried out by each company. In addition, lease payments are made on the equipment. A fleet of eight INPUT survey aircraft exists, which are normally based in the United States, Canada, South Africa and Australia. Since 1967, approximately 20 orebodies have been discovered using the system. According to the Society of Exploration Geophysicists, 80% of all of the world's commercial airborne electromagnetic surveys are carried out with the INPUT system.

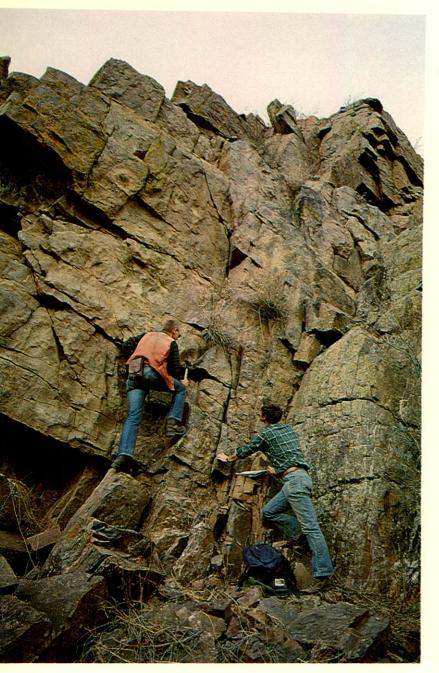
INPUT revenues were \$417,000, \$540,000 and \$480,000 for 1981, 1980 and 1979, respectively, with the decline during 1981 attributable largely to the downturn in minerals exploration activities worldwide and to the loss of the use of one system which was being removed from a fixed-wing aircraft for installation in a helicopter.



Recently-installed minicomputers in Barringer's U.S. analytic laboratories that provide faster processing and interpretation of test results.

Barringer maintains a professional staff experienced in geology, geochemistry, geophysics and data processing and has laboratory competence in analytical chemistry. The Company's staff of professionals provides exploration management and consulting, as well as field and airborne services.

The Company has developed new airborne and ground geophysical and geochemical methods for minerals



Collecting field samples for laboratory analysis.

which allows rapid turnaround of data for customers. Customers who wish to carry out their own computational or statistical work have direct access to their data in the computer data base.

Barringer's most comprehensive analytical laboratory is in Toronto. Instrumentation and facilities there can run a complete spectrum of routine geochemical and environmental analyses as well as an extensive list of specialized analyses using advanced instrumentation. Facilities include ion exchange liquid chromatography equipment and a laser vaporization system, designated LASERTRACE®, that is able to analyze 25 elements directly from powders and solids, at a rate of more than 1,000 samples per day. Installation of computer facilities in the Toronto laboratory has improved productivity significantly in multi-element analyses, used increasingly by customers of the Company for analysis of geochemical and environmental samples.

The Company's interests in Royex Sturgex Mining Limited and Barringer Fiji Limited, described below, represent interests acquired in part by the Company through exploration programs performed for others in which the Company retained a participating interest.

Royex Sturgex Mining Limited. The Company owns an aggregate of 487,265 shares, or approximately 18% of the outstanding shares, of Royex Sturgex Mining Limited ("Royex"). The principal asset of Royex is a 20% interest in the Cullaton Lake gold orebody, of which 10% is a carried interest. The owners of the controlling interest of the orebody brought the property into partial production in September 1981. Royex is publicly traded and listed on the Toronto Stock Exchange. Its bid prices on December 31, 1981 and March 10, 1982 were \$8.75 and \$3.00 (Canadian) respectively.

Barringer Fiji Limited. The Company has a 10% interest in certain prospecting rights in the Fiji Islands in a joint venture with Australia Anglo American Company Limited and AMAX, Inc. Exploration began in 1974, and while the exploration results are not considered encouraging, work is continuing. The Company has no financial obligations with respect to the program.

There are numerous companies that provide exploration and analytical geochemical services to the mining industry similar to those provided by the Company.

As of December 31, 1981, Barringer had a backlog of \$575,000 of work on hand. It is estimated that all such backlog will be completed by December 31, 1982.

exploration that are used primarily to detect deeply buried mineral deposits. In general, Barringer operates on a contract basis in its minerals exploration activities. Utilizing its previously discussed proprietary techniques and instrumentation in addition to conventional methods, the Company provides extensive analytical services. In some instances, the Company seeks an economic interest in the results of such programs.

Barringer operates four custom analytical laboratories which carry out assay and geochemical and environmental analyses for a broad range of customers. Laboratories have been established in Toronto, Ontario; Wheat Ridge, Colorado: Calgary, Alberta; and Sparks, Nevada. Extensive assay facilities have been installed in the Sparks laboratory, which opened in July 1980. The Company's U.S. laboratories are computer based

## Financial Highlights

(in thousands except per share data)

#### Consolidated Statement of Earnings

	Year Ended December 31				
1981	1980	1979	1978	1977	
Sale of goods & services	\$5,868	\$4,957	\$3,880	\$3,406	
Net income (loss)	684	460	162	34	
Income (loss) per share (0.79)	0.35	0.25	0.09	0.02	

#### Consolidated Balance Sheet

	Year Ended December 31			
<b>,</b> 1981	1980	1979	1978	1977
Working capital, net\$3,071	\$ 868	\$ 910	\$ 722	\$ 863
Total assets	4,903	3,346	2,213	1,822
Long-term obligations 4,958	104	182	_	_
Shareholders' equity	3,354	2,145	1,669	1,454

## Management's Discussion and Analysis of Financial Conditions and Results of Operations

As described in Note 8 to the Consolidated Financial Statements, Barringer issued \$5,000,000 of 12½% convertible subordinated debentures in July 1981. Net proceeds from these debentures were used to reduce short-term borrowings of approximately \$1,700,000, and to finance the Company's continued investment in oil and gas exploration techniques and development of new products for manufacture and sale. As of December 31, 1981, the Company had approximately \$1800,000 of unused proceeds on hand which will be used for oil and gas exploration activities and construction of new exploration systems.

Revenues. Sale of goods and services increased by 10% in 1981, 18% in 1980 and 28% in 1979. Refer to Note 13 of Notes to Consolidated Financial Statements for an analysis of revenues by principal activities.

Research and development revenues funded by third parties decreased during 1979 as a result of the completion of several major programs during 1978. Such revenues increased in 1980 over both prior years due to the implementation and completion of programs relating to a spectrometer for monitoring carbon monoxide in the atmosphere, a prototype minicomputer-controlled system for detection of extraneous metal on conveyor belts and test flights of an airborne mineral exploration system as well as the commencement of the TIVAC program relating to an airborne hydrocarbon exploration system. Increases in 1981 resulted from the continuation of the TIVAC program.

Increases in instrument sales in 1979 and 1980 are primarily attributable to sales of the Company's range of process control instruments designed to monitor heavy water content in nuclear reactors and increased sales and rentals of the Company's ground and oceanographic proton precession magnetometers. The decrease in instrument sales in 1981 was due, as anticipated, to a decline in heavy water monitor instrument sales, although the declines were partially offset by the introduction of the Hand Held Ratioing Radiometer and increases in deliveries of remote sensing instruments for monitoring atmospheric pollutants.

Minerals licensing, exploration and analytical services revenues increased in 1979 principally as a result of increases in volumes of geochemical analyses performed in the Company's various laboratories and royalties and rentals received on an airborne minerals exploration system placed into operation in 1979. Declines in 1980 were attributable to decreased royalties with respect to an airport metal detection system relating to a licensee withholding payment of such royalties and disputing the validity of the Company's patents related to this system. (Refer to Note 12 of Notes to Consolidated Financial Statements). Increases in revenues in 1981 were due primarily to higher volumes of geochemical analyses in the Company's various laboratories.

Oil and gas revenues in 1981 are attributable to contract fees paid to the Company under various oil and gas exploration agreements. Interest income in 1981 was attributable to short-term investments of unused proceeds arising from the issuance of debentures as discussed below, under "Interest Expense."

Refer to Note 3 of Notes to Consolidated Financial Statements for discussion of gain on sale of investments.

Cost of Goods Sold. Cost of goods sold was relatively constant as a percentage of total revenues during 1979 and 1980. Increases in 1981 were due to expansion of facilities and management to handle expanding oil and gas activities and start up of the new laboratory in Reno in late 1980.

Research and Development Expenses. These expenditures represent the in-house funding of proprietary and patent-oriented activities. Management believes these activities are important to its future patenting and licensing positions as well as its current revenue producing programs. The decrease in 1979 from 1978 was the result of the commencement of the Company's exploration activities for its own account, as a result of which \$91,000 that would have been included in research and development expense was classified as exploration expense. The increases in 1981 and 1980 were primarily attributable to in-house funding directed towards the continued development of techniques for oil and gas exploration, an airborne minerals exploration system and new products for commercial manufacturing.

Research and development expenses are incurred at the discretion of management, based, in part, upon availability of funds.

Exploration Expense. The Company has adopted the "full cost" method of accounting, whereby all costs associated with oil and gas property acquisitions and exploration and development activities are capitalized within a cost center and will be amortized over any future production. As of December 31, 1981, the Company had no proven reserves. All exploration expense as shown on the income statements relates, in 1980, to Canada where the Company has, for the present, abandoned its oil and gas exploration activities there. Such expenses in 1981 pertain to exploration programs in the U.S. whereby the Company's efforts did not result in it obtaining interests in oil and gas properties upon interpreting the results of the related exploration program.

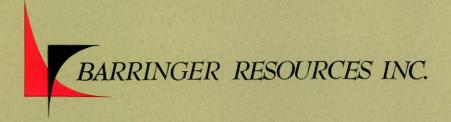
General and Administrative Expenses. These expenses increased during 1979 as a result of inflationary trends. In addition to continued inflation, the 1980 increase was attributable in large part to professional services rendered in connection with various licensing agreements, such as the Petro-Canada Agreement (see "Research and Development"), certain oil and gas exploration agreements and certain litigation as well as fees and expenses attributable to the preparation of a public offering of common stock which was superceded by the debenture offering in 1981. Increases in 1981 were largely attributable to additional expenses incurred in conjunction with the preparation of a public offering of common stock superceded by the debenture offering in 1981 and from professional fees associated with litigation.

Interest Expense. Interest expense increased during 1979 and 1980 as a result of higher interest rates, increased bank indebtedness and capital leases and a long-term loan obtained in 1979. The increase in 1981 was primarily due to accrued interest on the 12½% subordinated, convertible debentures issued on July 17, 1981. The average short-term bank indebtedness outstanding during 1981, 1980 and 1979 was approximately \$680,000, \$690,000 and \$385,000, respectively, and the weighted average bank interest rate paid during the three years was 18.9%, 16.2% and 13.8%, respectively.

Other Expenses. Other expenses primarily reflect gains and losses on translations of amounts from Canadian dollars into United States dollars.

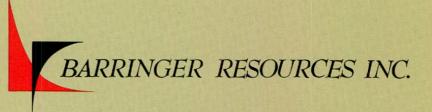
Income Tax Provisions. Current income tax provisions represent a charge equivalent to the benefit of tax losses and timing differences brought forward relating to the Company's Canadian operations.

The \$206,000 deferred income tax provision results from the 1980 Royex transaction as discussed in Note 3 of Notes to Consolidated Financial Statements.



## Consolidated Statement of Earnings For the Years Ended December 31, 1981, 1980 and 1979

	1981	1980	1979
Revenues			
Sale of goods and services	\$ 6,484,302	\$5,868,393	\$4,956,784
Interest			
Gain on sale of investments (Note 3)	57,813	824,333	
	6,745,253	6,692,726	4,956,784
Costs and expenses			
Cost of goods and services sold		3,854,323	3,232,135
Research and development		475,758	273,604
Exploration expenses (Note 4)		142,108	91,482
General and administrative		1,186,350	946,029
Interest		130,296	53,576
Other	(33,240)	14,117	(99,820)
	8,285,436	5,802,952	4,497,006
Income (loss) before income taxes and			
extraordinary item	(1,540,183)	889,774	459,778
Provision for income taxes (Note 10)	74,000	426,000	308,000
Income (loss) before extraordinary item	(1,614,183)	463,774	151,778
losses and timing differences brought forward (Note 10)	74,000	219,917	308,000
Net income (loss)	\$(1,540,183)	\$ 683,691	\$ 459,778
Per share data			
Income (loss) before extraordinary item	\$ (0.83)	\$ 0.24	\$ 0.08
Extraordinary item	0.04	0.11	0.17
Net income (loss)		\$ 0.35	\$ 0.25
Weighted average shares outstanding	1,952,183	1,930,025	1,812,034



## Consolidated Balance Sheet

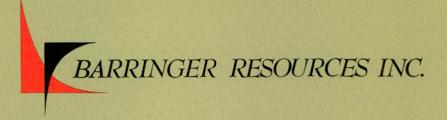
As of December 31, 1981 and 1980

Assets	1981	1980
Current assets		
Cash and temporary cash investments	\$1,945,289	\$ 6,493
Trade, less allowance for doubtful accounts, 1981-\$82,670; 1980-\$36,096	1,449,730	1,107,789
Selling price of contracts in process, less billings	375,465	476,957
Inventories (Note 2)	772,785	434,973
Deposits, advances and prepaid expenses	52,640	80,319
Total current assets	4,595,909	2,106,531
Investments (Note 3)	850,350	861,034
at cost determined by full cost method (Note 4)	528,518	213,119
Plant, property and equipment, net (Note 5)	1,776,474	1,474,665
Deferred financing costs (Note 8)	598,247	
Patents and trademarks, at cost less accumulated amortization of		
\$94,145 in 1981 and \$81,745 in 1980	200,792	180,067
Other	68,101	67,856
	\$8,618,391	\$4,903,272

Liabilities and Shareholders' Equity	1981	1980
Current liabilities  Bank indebtedness (Note 6)	\$ 387,107	\$ 478,171
Current portion of capital lease obligations (Note 7)		28,530
Accounts payable		409,500
Accrued liabilities		210,437
Accrued interest	284,517	
Excess of billings over selling price of contracts in progress	50,985	112,270
Total current liabilities	1,524,987	1,238,908
Long-term debt (Note 8)	4,899,527	20,878
Obligations under capital leases (Note 7)		83,475
Deferred income taxes (Note 10)		206,083
Total liabilities	6,689,396	1,549,344
Commitments and contingencies (Notes 7 and 12)	-	
1980 — 2,141,464 shares (Note 9)	21,576	21,415
Additional paid-in capital		2,549,519
Retained earnings (deficit)		882,395
	2,028,396	3,453,329
Less: Common stock in treasury, at cost, (197,000 shares)	(20,401)	(20,401)
Due from officer/shareholder (Note 9)	(79,000)	(79,000)
	(99,401)	(99,401)
Total shareholders' equity	1,928,995	3,353,928
	\$8,618,391	\$4,903,272

# Consolidated Statements of Changes in Financial Position For the Years Ended December 31, 1981, 1980 and 1979

Tof the Tears Ended Becombor of, 1001, 1000 and 1010	1981	1980	1979
Source of funds from operations			
Income (loss) before extraordinary item	\$(1,614,183)	\$ 463,774	\$ 151,778
Items not involving funds			
Benefit of operating losses and timing differences	74.000	010.017	000 000
brought forward		219,917	308,000
Depreciation and amortization		307,093	226,204
Deferred income taxes	(57,813)	206,083	
Gain on sale of investments		(824,333) 593	(18,230)
Other			The second second second
Working capital provided by (used in) operations Issue 12½% subordinated convertible debentures,		373,127	667,752
net of issuance costs	4,382,897		
Issue shares of common stock	115,250	516,130	5,000
Net financing on capital leases			112,672
Net proceeds from long-term debt	_		125,000
Proceeds on sale of investment	68,496	01.754	27.567
Other		21,754	37,567
	3,451,605	911,011	947,991
Use of funds			
Additions to interests in unproven oil and gas properties	315,399	213,119	
Conversion of debt to common shares	113,000		
Additions to leased property under capital leases			201,774
Reduction in long-term debt		69,444	55,556
Purchases of plant, property and equipment		604,216	478,669
Other	66,725	66,552	24,377
	1,248,306	953,331	760,376
Increase (decrease) in working capital	2,203,299	(42,320)	187,615
Working capital, beginning of year		909,943	722,328
Working capital, end of year	\$ 3,070,922	\$ 867,623	\$ 909,943
Changes in components of working capital			
Working capital — beginning of year	\$ 867,623	\$ 909,943	\$ 722,328
Increase (decrease) in cash and			
temporary cash investments	1,938,796	(12,993)	12,911
Increase (decrease) in receivables		(52,430)	626,311
Increase in inventories	337,812	196,680	24,489
Increase (decrease) in other current assets		46,837	(1,822)
(Increase) decrease in bank indebtedness		(55,764)	(210,308)
(Increase) in other liabilities	(377,143)	(164,650)	(263,966)
Increase (decrease) in working capital	2,203,299	(42,320)	187,615
Working capital — end of year	\$ 3,070,922	\$ 867,623	\$ 909,943
Funds represented by:			
Current assets	\$ 4,595,909	\$2,106,531	\$1,928,437
Current liabilities		1,238,908	1,018,494
	\$ 3,070,922	\$ 867,623	\$ 909,943
See notes to consolidated financial statements.			



## Consolidated Statement of Shareholders' Equity

For the Years Ended December 31, 1981, 1980 and 1979

	Common	Common Stock A		Retained Earnings	Treasury	Due from Officer/
	Shares	Amount	Paid-in Capital	(Deficit)	Stock	Shareholder
Balance at January 1, 1979  Common stock issued through	984,400	\$ 9,844	\$2,029,974	\$ (251,088)	\$20,421	\$79,000
exercise of stock options  Net income	4,000	40	4,960	459,778	Ξ	Ξ
Balance at December 31, 1979 Common stock issued through	988,400	9,884	2,034,934	208,690	20,421	79,000
exercise of stock options Stock split effected in form	10,200	102	10,098	-		_
of stock dividend  Common stock issued through	998,600	9,986	_	(9,986)		
exercise of stock options Common stock issued in	42,400	424	45,526			
consideration of debt  Common stock issued	2,064	21	9,979		-	
for cash  Common stock issued	100,000	1,000	449,000			
from treasury  Net income	(200)	(2)	(18)	683,691	(20)	
Balance at December 31, 1980 Common stock issued through	2,141,464	21,415	2,549,519	882,395	20,401	79,000
exercise of stock options Common stock issued in consideration of 12½% subordinated convertible	2,000	20	2,230	-	_	
debentures  Net loss	14,125	141	112,859	(1,540,183)		
Balance at December 31, 1981	2,157,589	\$21,576	\$2,664,608	\$ (657,788)	\$20,401	<u>\$79,000</u>

### Notes to Consolidated Financial Statements

## 1. Summary of Significant Accounting Policies Principles of consolidation:

The accompanying consolidated financial statements comprise the accounts of the Company and its active subsidiary companies. All intercompany transactions have been eliminated.

#### Principles of translation:

The accounts of the foreign subsidiaries 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 accounts.
- (iii) Current assets and liabilities at year-end rates.
- (iv) Other assets and liabilities at historic rates.

Operations reflect gains on foreign exchange translation and transactions of \$31,856, \$7,760 and \$79,865 for 1981, 1980 and 1979, respectively.

#### Selling Price of Contracts-in-Process:

The percentage of completion method is used to account for contracts in process with anticipated losses on contracts, if any, being provided for in full.

#### Inventories:

Materials and supplies are carried at cost. Finished goods and work-in process are carried at the lower of average cost of net realizable value.

#### Investments:

Investments are carried at cost less any amounts written off.

#### Patents and Trademarks:

Patents and trademarks are carried at cost and are amortized over seventeen years which approximates their useful lives. Amortization amounted to \$12,400, \$11,416 and \$10,153 for 1981, 1980 and 1979, respectively.

#### Plant, Property and Equipment:

Plant, property and equipment are carried at cost. Depreciation is taken on a straight-line basis over the estimated useful lives of the related assets, generally from four to ten years. Leasehold improvements are amortized over the term of the related lease, generally from five to twenty years. Equipment under capital leases is amortized on the straight-line method over the term of the lease, generally five to ten years.

#### Interests in Unproven Oil and Gas Properties:

The Company has adopted the "full cost" method of accounting whereby all costs associated with interests in oil and gas properties incurred through acquisition, exploration and development activities are capitalized. Such costs, in the opinion of management of the Company, are not in excess of their net realizable value.

As of December 31, 1981 and 1980, the Company was in the early stages of acquiring and earning interests in oil and gas properties and consequently had no proved reserves. All costs associated with interests in unproven oil and gas properties have therefore been capitalized but not amortized. All such costs are related to exploration activity in the United States where the Company is actively acquiring interests in unproven oil and gas properties.

Until such time as the Company is successful in discovering or earning proved reserves, all exploration costs for separate prospects will be evaluated individually. Abandoned prospects will be charged to exploration expense (Note 4). The eventual recovery of the Company's investment in unproven oil and gas properties is dependent upon the discovery of adequate proven reserves or subsequent sales of the properties.

#### Income Taxes:

The Company files United States income tax returns on a consolidated basis with its United States subsidiary. Canadian subsidiaries are required to file separate income tax returns.

The Company provides for deferred income taxes as a result of timing differences in the recognition of income and expenses for financial and tax reporting purposes in the United States and Canada.

Investment tax credits are recognized as a reduction of income taxes in the year in which the credits are utilized.

#### Income (loss) per Share:

Income (loss) per share is based on the weighted average number of shares outstanding using the treasury stock method and includes, where applicable, shares issuable during the year upon exercise of options. All income (loss) per share information has been adjusted retroactively to reflect a 1980 two-for-one stock split effected as a 100% stock dividend.

#### Reclassifications:

Certain of the December 31, 1980 and 1979 figures have been reclassified to conform to the December 31, 1981 financial statement presentation.

#### 2. Inventories

The major categories of inventories are as follows:

December 31, 1981	December 31, 1980
\$206,966	\$149,672
502,922	243,946
62,897	41,355
\$772,785	\$434,973
	\$206,966 502,922 62,897

3. Investments Investments are summarized as follows:	Book Value Dec. 31, 1981	Market Value Dec. 31, 1981	Book Value Dec. 31, 1980	Market Value Dec. 31, 1980
Royex Sturgex Mining Limited —				
487,265 common shares	\$833,334	\$3,597,200-	\$833,334	\$2,070,900
Petro Minerals Inc			10,000	60,000
Other Investments	17,016	No quoted	17,700	No quoted
	\$850,350	value	\$861,034	value

At December 31, 1979, a subsidiary owned 237,265 shares (14%) in Royex Sturgex Mining Limited (Royex) which were carried on the balance sheet at a written down value. By an agreement dated October 23, 1980, the Company acquired an additional 250,000 shares in Royex (valued at the then market price of \$4.00 [Canadian] per share) in exchange for a 3.6% direct interest in the Cullaton Lake gold orebody and increased its interest in Royex to 25%. In January of 1981, Royex completed a sale of 750,000 shares of common stock at a price of \$3.75 (Canadian) per share which diluted the subsidiary's interest to approximately 18%. Royex is traded on the Toronto Stock Exchange. The market value as at March 10, 1982 was \$1,206,000.

The Company sold 40,000 shares of common stock of Petro Minerals Inc. during 1981 and realized a gain on the sale of approximately \$57,800.

#### 4. Interests in Unproven Oil and Gas Properties

The Company has developed various new geochemical and geophysical techniques pertaining to exploration for oil and gas. Utilizing these techniques, the Company conducts exploration programs over oil and gas properties owned by others to identify specific prospect areas that have the potential for oil and gas production. Such exploration programs are conducted under terms of various agreements whereby the Company earns the right to an interest in the related oil and gas properties under certain conditions, generally upon the successful drilling of wells. Exploration programs are also conducted for the Company's own account whereby it seeks to purchase interests in oil and gas properties upon interpreting the results of the exploration program. In the event the Company's efforts do not result in it obtaining interests in oil and gas properties

either by direct purchase or by successful drilling, the related costs are charged to exploration expense. Such expenses amounted to \$375,677, \$142,108 and \$91,482 for 1981, 1980 and 1979, respectively.

#### 5. Plant, Property and Equipment

The major categories of plant, property, and equipment, which are carried at cost, are as follows:

Owned:	December 31, 1981	December 31, 1980
Office furniture and		
equipment	\$ 387,063	\$ 232,511
Plant, machinery and		
exploration equipment		1,836,900
Equipment for lease	644,241	581,568
Leasehold improvements	564,687	467,582
	3,871,018	3,118,561
Accumulated depreciation		
and amortization	2,213,840	1,813,290
	1,657,178	1,305,271
Held Under Capital Leases		
(Note 7):		
Office equipment	35,033	35,033
Plant and machinery	123,820	166,741
	158,853	201,774
Accumulated amortization	39,557	32,380
	119,296	169,394
Total	\$1,776,474	\$1,474,665
		Charles September 1

Depreciation and amortization amounted to \$431,844, \$282,622 and \$204,464 for 1981, 1980 and 1979, respectively.

#### 6. Bank Indebtedness

The Company has short-term lines of credit aggregating \$775,000 from various banks. At December 31, 1981, the Company had approximately \$387,000 outstanding under these short-term lines of credit and had available unused credit of approximately \$388,000. The arrangements terminate and are reviewed annually for renewal.

The bank indebtedness is collateralized by a general lien on assets of up to \$800,000 (Canadian), a general assignment of accounts receivable and an assignment of a life insurance policy on the life of the president of the Company.

#### 7. Leasing Activities

Future minimum lease payments under capital leases are as follows:

Year ending December 31,	
1982	\$ 37,424
1983	36,181
1984	30,923
Minimum lease payments	104,528
Less: Amount representing interest	(18,157)
Present value of minimum lease payments —	
December 31, 1981	\$ 86,371

The Company rents office and laboratory facilities, automobiles and equipment under various operating leases. Rental expenses under such leases amounted to \$404,700, \$253,400 and \$91,500 for 1981, 1980 and 1979, respectively. At December 31, 1981, the aggregate minimum lease commitments for all operating leases are as follows:

Year endin	a Decemi	ber 31.
------------	----------	---------

1982	\$ 363,700
1983	357,800
1984	268,600
1985	91,200
1986	65,900
1987 and thereafter	179,500
	\$1,326,700

#### 8. Long-Term Debt

#### Debentures:

On July 17, 1981, the Company issued \$5,000,000 of 12½% subordinated convertible debentures. Interest is payable semi-annually on January 15 and July 15 of each year. The debentures have a 15 year maturity and are callable, with a declining call premium, after February 1, 1982. The call price in 1982 is 112.5% and declines at 1% per annum through 1994 and is 100% thereafter. The debentures are convertible into Common Stock of the Company at \$8.00 per share. The debentures are subordinated to all senior indebtedness of the Company.

The Company has agreed, commencing on July 15, 1988, and annually thereafter through July 15, 1995, to redeem \$470,000 of debentures at 100% of their principal amount, plus accrued interest. At its option, the Company may also redeem up to an additional \$470,000 principal amount of debentures each July 15 commencing July 15, 1988. Such option is not cumulative. The Company may take credit against its sinking fund obligation for debentures acquired by it and surrendered to the trustee for cancellation or redemption through the sinking fund and conversion into common stock.

Costs relating to the debenture issue in the amount of \$617,103 have been deferred and are being amortized over 15 years. Amortization for the year ended December 31, 1981 was \$18,856.

#### Other:

Other long-term debt amounted to \$12,527 in 1981 and \$20,878 in 1980 pertaining to a non-interest bearing note payable, maturing serially from 1982 to 1984.

#### 9. Shareholders' Equity

#### Common Stock:

In 1980, the Company declared a two-for-one stock split effected in the form of a 100% stock dividend. The number of shares pertaining to common stock, stock option plans, and the calculation of per share information has been restated to give the effect to such stock-split.

The Company increased the number of authorized common shares from two million to ten million in 1980.

#### Stock Options:

#### (a) 1972 unqualified stock option plan:

In 1972 the Company adopted an unqualified stock option plan covering 290,000 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 grant of the option. These options are exercisable at varying times from date of grant, provided the optionee continues as a director or remains in the employ of the Company or a subsidiary, and expire five years from the date of the grant. The Company has a 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. Information with respect to this stock option plan is summarized as follows:

	Shares	Amount
Options granted subsequent to		
1972 and outstanding at	04.000	Φ 04 550
December 31, 1978	91,800	\$ 61,550
Changes during 1979 Options granted at market value	16.000	17,500
Options exercised	(8,000)	(5,000)
Options cancelled and expired		(14,450)
Options outstanding at		
December 31, 1979	80,400	59,600
Changes during 1980		
Options granted at market value		496,375
Options exercised		(23,400)
Options cancelled and expired	(2,000)	(1,500)
Options outstanding at		
December 31, 1980	132,600	531,075
Changes during 1981		
Options granted at market value	52,900	268,687
Options exercised	(2,000)	(2,250)
Options cancelled and expired	(34,000)	(193,250)
Options outstanding at		
December 31, 1981	149,500	\$604,262

#### (b) 1980 unqualified stock option plan:

In 1980 the Company adopted an unqualified stock option plan covering 150,000 shares of common stock of the Company. Options may be granted to directors, officers and other 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. These options are exercisable two years from date of grant, provided the optionee continues as a director or remains in the employ of the Company or subsidiary, and expire five years from the date of grant. The Company has a first right of refusal to reacquire shares purchased under this option plan at a formula price equivalent to 75% of the quoted value of the shares. The Company has undertaken to register under the Securities Act of 1933 the shares subject to this plan before expiration of two years from the first grant of an option under the plan, such registration to be kept effective as may be required. Information with respect to this stock option plan is summarized as follows:

Shares	Amount
Changes during 1980	
Options granted at	
market value	\$531,750
Options cancelled and expired (5,500)	(23,375)
Options outstanding at	
December 31, 1980119,000	508,375
Changes during 1981	
Options cancelled and expired (27,000	(117,375)
Options outstanding at	
December 31, 1981 92,000	\$391,000
	The second second

#### (c) 1982 incentive stock option plan:

In December 1981, the Company adopted an Incentive Stock Option Plan pursuant to the Economic Recovery Tax Act of 1981 ("Act") covering 100,000 shares of common stock of the Company. Options may be granted to directors, officers and other employees of the Company or its subsidiaries. The Act generally requires that Incentive Stock Option plans be approved by shareholders, options must be granted within ten years of plan adoption, the option price must equal or exceed the fair market value of the stock at the time the option is granted, the options must not be transferable and the optionee must exercise the options while an employee or within three months of termination, shareholders holding more than 10 percent of the voting power of all outstanding stock may not be granted incentive stock options, incentive stock options

must be exercised in the same order they were granted, and the maximum value of shares for which any employee may be granted options is \$100,000 at the grant date, plus a special carryover for up to three years. The options are exercisable two years from the date of grant and expire five years after date of grant. During 1981, options for 32,000 shares were granted for an aggregate price of \$140,000, subject to shareholder approval of the plan in 1982.

#### (d) 1982 unqualified stock option plan:

In December 1981, the Company adopted, subject to shareholder approval in 1982, an unqualified stock option plan covering 200,000 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 grant of the option. These options are exercisable at varying times from date of grant, provided the optionee continues as a director or remains in the employ of the Company or a subsidiary, and expire five years from the date of the grant. No options have been granted under this plan.

#### (e) Other Stock Options:

The Company also grants stock options to consultants as authorized by the Board of Directors. These options are exercisable at varying times from date of grant and expire five years from date of grant.

	Shares	Amount
Options outstanding at December 31, 1978 Changes during 1979 Options granted at market value		\$32,750 22,500
Options outstanding at		
December 31, 1979		55,250 (32,750)
Options outstanding at December 31, 1980 Changes during 1981	20,000	22,500
Options granted at market value	10,000	47,500
Options outstanding at December 31, 1981	30,000	\$70,000

#### Warrants:

Under the terms of the underwriting agreement covering the \$5,000,000 of 12½% subordinated convertible debentures (Note 8), the Company sold to the underwriters for \$500, warrants to purchase 50,000 shares of common stock. The warrants are exercisable after July 15, 1982 at an exercise price equal to 110% of the conversion price of the debentures which is \$8.00 per share of common stock for up to five years from the date of the debenture prospectus, July 17, 1981.

In connection with the termination of a joint venture with certain parties in 1980, the Company sold to such parties an aggregate of 100,000 shares of common stock at a price of \$4.50 per share and issued warrants to such parties to purchase an additional 100,000 shares of common stock of the Company. These warrants are exercisable over a three year period ending December 1, 1983, at a purchase price of \$10.00 per share.

#### Shares of Common Stock Reserved for Issuance:

	December 31, 1981	December 31, 1980
For stock options		
Options outstanding	303,500	271,600
future options	444,900	78,800
	748,400	350,400
For 5-year warrants, issued		
July 17, 1981	50,000	_
For 3-year warrants, issued		
December 1, 1980	100,000	100,000
	898,400	450,400

#### Due from Officer/Shareholder:

In connection with the issuance of unregistered shares under an employment agreement, an officer/shareholder signed a promissory note with the Company. The note matures and is payable on June 30, 1985, and bears interest at the rate of 4% per annum, payable guarterly.

#### 10. Income Taxes

#### U.S. income taxes:

There were no U.S. income taxes payable for the three years ended December 31, 1981. The Company has net operating loss carryforwards for income tax purposes, as set forth below, that can be used to reduce taxable U.S. income in future years. These losses will expire as follows:

1991	 \$ 94,000
1993	 105,000
1994	 112,000
1996	 1,604,000
	\$2,365,000

#### Canadian income taxes:

The Company has net operating loss carryforwards for income tax purposes of approximately \$114,000 that can reduce taxable Canadian income until 1986, and capital cost allowances (tax depreciation) and other deductions of approximately \$600,000 already expensed for book purposes that can be deducted for tax purposes at any future time.

#### Deferred income taxes:

As of December 31, 1981, a Canadian subsidiary had recorded \$206,083 of deferred income taxes. These taxes will be payable only in the event that the subsidiary sells its 250,000 shares of common stock of Royex Sturgex Mining Limited received in the exchange discussed in Note 3.

#### Reconciliation of income taxes:

A reconciliation of income taxes at United States statutory

Tales to the elective lax rate lenews.	1981	
	Amount	Rate
Income taxes computed at the United States statutory rate Losses with no tax benefit Consolidated subsidiaries outside the	\$(708,000) 791,000	(46%) 51
United States: Canadian inventory allowance	(8,000)	_
Non-taxable portion of capital gains		-
Exchange losses not deductible		-
Tax rate differential on earnings	8,000	
Other, net	(9,000)	
Provision for Income Taxes		5%

#### 11. Pension Plan

A Canadian subsidiary maintains a pension plan that provides retirement benefits for all of its employees with more than one year of service. The aggregate cost of the plan was \$40,783, \$32,775 and \$20,141 for 1981, 1980 and 1979, respectively. As a foreign pension plan, this plan is not required to report under FRISA and does not otherwise determine the actuarial value of accrued benefits. The net assets of the pension fund exceed vested benefits.

#### 12. Litigation

In March, 1981, the Company brought an action in the United States District Court, District of Maryland, against Intex, Inc. ("Intex"), a licensee under certain patents of the Company relating to "walk-through" metal detection devices used for airport security, for breach of patent license agreement and to recover royalties due since March 31, 1980.

In its answer, Intex claims that the Company's patents relating to "walk-through" metal detectors are "invalid and unenforceable" and seeks an order that the license agreement be declared null and void, seeks restitution of approximately \$401,000 of royalties paid by Intex to the Company plus interest and alleges that the Company has sought illegally to control and monopolize interstate and foreign commerce in "walkthrough" metal detectors through the enforcement of allegedly invalid and unenforceable patents in violation of Sections 1 and 2 of the Sherman Act. Intex seeks treble damages in the amount of approximately \$1,038,000 from the Company.

In the opinion of special counsel retained by the Company with respect to these counterclaims, the Company has meritorious defenses to such claims and the likelihood that Intex will be successful on such claims is remote.

rates to the effective tax rate follows:	1981		1980		1979	
	Amount	Rate	Amount	Rate	Amount	Rate
Income taxes computed at the United States statutory rate	\$(708,000)	(46%)	\$409,000	46%	\$211,000	46%
Losses with no tax benefit		51	199,000	22	65,000	14
Consolidated subsidiaries outside the United States:						
Canadian inventory allowance	(8,000)	-	(9,000)	(1)	(7,000)	(1)
Non-taxable portion of capital gains			(212,000)	(24)	(3,000)	(1)
Exchange losses not deductible	_	_	30,000	3	14,000	3
Tax rate differential on earnings	8,000	_	36,000	4	18,000	4
Other, net			(27,000)	(2)	10,000	2
Provision for Income Taxes		5%	\$426,000	48%	\$308,000	67%

13. Information Concerning the Company's Principal Activities
A summary of the Company's operations by principal activity for the three years ended December 31, 1981, 1980 and 1979 follows:

1981	Total	Research and Development	Instrument Manufacture and Sale	Minerals Licensing Exploration & Analytical Services	Oil and Gas	Corporate
Revenues	\$6,745,253	\$1,118,744	\$1,146,100	\$4,009,361	\$ 201,115	\$ 269,933
Operating income (loss)	1,658,177	109,293 286,484	100,917 293,489	944,759 1,026,703	(704,448) 51,501	46,916 — 379,443
Income (loss) before income taxes	(1,540,183)	(177,191)	(192,572)	(81,944)	(755,949)	(332,527)
Depreciation and amortization	471,779	42,018	16,565	281,690	41,437	90,069
Capital expenditures	744,831	83,754	65,245	266,635	115,857	213,340
Identifiable assets	8,618,391	712,868	1,190,932	1,963,847	730,023	4,020,721
1980 Revenues	6,692,726	937,519	1,451,374	3,479,500		824,333
Operating income (loss)	1,186,350	83,788 188,630	428,212 293,028	884,204 704,692	_	824,333 — 144,413
Income (loss) before income taxes	889,774	(104,842)	135,184	179,512	_	679,920
Depreciation and amortization	307,093	30,291	12,188	241,973		22,641
Capital expenditures	604,216	26,733	15,241	519,884		42,358
Identifiable assets	4,903,272	627,566	837,611	1,871,260	213,119	1,353,716
1979 Revenues	4,956,784	917,368	514,317	3,525,099		261
Operating income (loss)	1,359,563 946,029 (46,244)	54,645 195,429	320,332 109,929	984,586 640,671		  (46,244)
Income (loss) before income taxes	459,778	(140,784)	210,403	343,915		46,244
Depreciation and amortization	226,204	33,256	9,074	172,287		11,587
Capital expenditures	478,669	43,656	4,517	344,454		86,042
Identifiable assets	3,346,005	488,018	600,615	2,121,082		136,290

Identifiable assets are those assets used in the operation of each activity. General corporate assets consist of cash, prepaid expenses, investments and other assets.

13. Information Concerning the Company's Principal Activities (Continued)

A summary of the Company's operations by geographic areas for the three years ended December 31, 1981, is as follows:

	1981	1980	1979
Total revenues			
United States	. \$ 2,422,247	\$1,544,580	\$1,334,126
Canada		5,102,002	3,622,658
Europe	. 10,919	46,144	
Totals	. \$ 6,745,253	\$6,692,726	\$4,956,784
Not in same (loss) hefers toyon			
Net income (loss) before taxes United States	\$(1.266.905)	\$ (402,897)	\$ (169,539)
Canada		1.281,168	629.317
Europe		11,503	- 020,011
Totals		\$ 889,774	\$ 459,778
Totals	=======================================	=======================================	<del>=====</del>
Identifiable assets			
United States		\$1,653,221	\$ 908,128
Canada		3,226,640	2,437,877
Europe	. 1,800	23,411	
Totals	. \$ 8,618,391	\$4,903,272	\$3,346,005

## Report of Independent Certified Public Accountants

To the Shareholders of Barringer Resources Inc.

We have examined the consolidated balance sheets of Barringer Resources Inc. as of December 31, 1981 and 1980, and the related consolidated statements of earnings, shareholders' equity and changes in financial position for the years ended December 31, 1981, 1980 and 1979. Our examinations were 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.

In our opinion, the consolidated financial statements referred to above present fairly the financial position of Barringer Resources Inc. as of December 31, 1981 and 1980, and the results of its operations and the changes in its financial position for the years ended December 31, 1981, and 1980 and 1979, in conformity with generally accepted accounting principles applied on a consistent basis.

COOPERS & LYBRAND

Denver, Colorado February 26, 1982, except for Note 3 as to which the date is March 10, 1982.

## Market for the Company's Common Stock and Related Security Holder Matters

The Company's Common Stock is traded on the over-the-counter market and reported on NASDAQ under the symbol BARR. The Company's Common Stock is also listed for trading on the Alberta Stock Exchange but is not actively traded on that Exchange. The following table shows the range of high and low bid prices of the Company's Common Stock as reported by the National Quotation Bureau, Inc.

1981	High	Low
First Quarter	\$ 8.25	\$5.75
Second Quarter	7.25	5.00
Third Quarter	12.75	6.25
Fourth Quarter	7.50	4.25
1980		
First Quarter	\$ 6.50	\$1.50
Second Quarter	5.00	3.00
Third Quarter	8.25	3.25
Fourth Quarter	8.75	6.25

The above prices represent quotations among dealers without adjustment for retail mark-ups, mark-downs or commissions. They do not necessarily represent actual transactions. The above quotations have been adjusted to reflect the stock split

effected in the form of a 100% stock dividend effective March 25, 1980.

The approximate number of shareholders of record as at March 10, 1982 was 848.

The Company has not paid any cash dividends since inception.

#### **Annual Meeting**

The Annual Meeting of Shareholders will be held in Golden, Colorado on June 3, 1982. The usual notice and proxy materials will be mailed to all registered shareholders in advance of the meeting.

#### Additional Information

Barringer also prepares a Form 10-K for the Securities and Exchange Commission and as a supplement to the Annual Report. Shareholders may obtain this report by writing to the Company at:

Barringer Resources Inc. 1626 Cole Boulevard, Suite 120 Golden, Colorado 80401

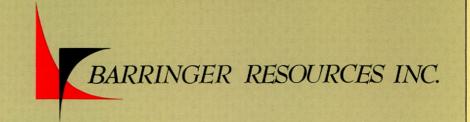
### Corporate Information

#### Officers

Dr. Anthony R. Barringer, *President*Dr. D. Richard Clews, *Exec. Vice Pres.*John H. Davies, *Vice President*Dr. W. Timothy Meyer, *Vice Pres.*Andrew Murray, *Vice President*Robert J. Armstrong, *Secretary*Robert R. Gilmore, *Treasurer*Kenneth H. Dalton, *Controller* 

#### **Directors**

Robert J. Armstrong
Dr. Anthony R. Barringer
Daniel R. Bereskin
Dr. D. Richard Clews
Gary M. Cook
Sholly Kagan
Brandon W. Sweitzer
Frank Van Kasper
Roger C. Wilson



Corporate Counsel Satterlee & Stephens 277 Park Avenue New York, New York, 10172

Blackwell, Law, Spratt, Armstrong & Grass 110 Yonge Street, Suite 1501

110 Yonge Street, Suite 1501 Toronto, Ontario, Canada M5C 1V2

Stock Traded
Over-the-counter
NASDAQ Symbol: BARR

**Auditors** 

Coopers & Lybrand Certified Public Accountants 2500 Anaconda Tower Denver, Colorado 80202

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

### Offices and Research Facilities

Barringer Resources Inc. 1626 Cole Blvd., Suite 120 Golden, Colorado 80401

Phone: 303/232-8811 Telex: 45810 Barringer Research Limited 304 Carlingview Drive Metropolitan Toronto, Rexdale Ontario, Canada M9W 5G2

Phone: 416/675-3870 Cable: Baresearch, Toronto/ Telex 06-989183

### Geochemical Laboratories

Barringer Resources Inc. Ward Road Laboratory 5161 Ward Road Wheat Ridge, Colorado 80033

Phone: 303/423-2220

Barringer Resources, Inc. Reno Laboratory 1455 Deming Way, Suite 15 Sparks, Nevada 89431

Phone: 702/358-1158

Barringer Magenta Limited 304 Carlingview Drive

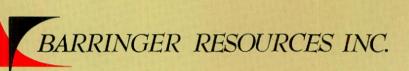
Metropolitan Toronto, Rexdale Ontario, Canada M9W 5G2

Phone: 416/675-3870

Barringer Magenta Limited 3750 19th Street, Northeast Suite 105 Calgary, Alberta T2E 6V2

Phone: 403/276-9701

TRADEMARKS: INPUT, COTRAN, TIVAC COSPEC, GASPEC, RADIOPHASE, E-PHASE, AIRTRACE, SURTRACE, LASERTRACE, VAPOURTRACE



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