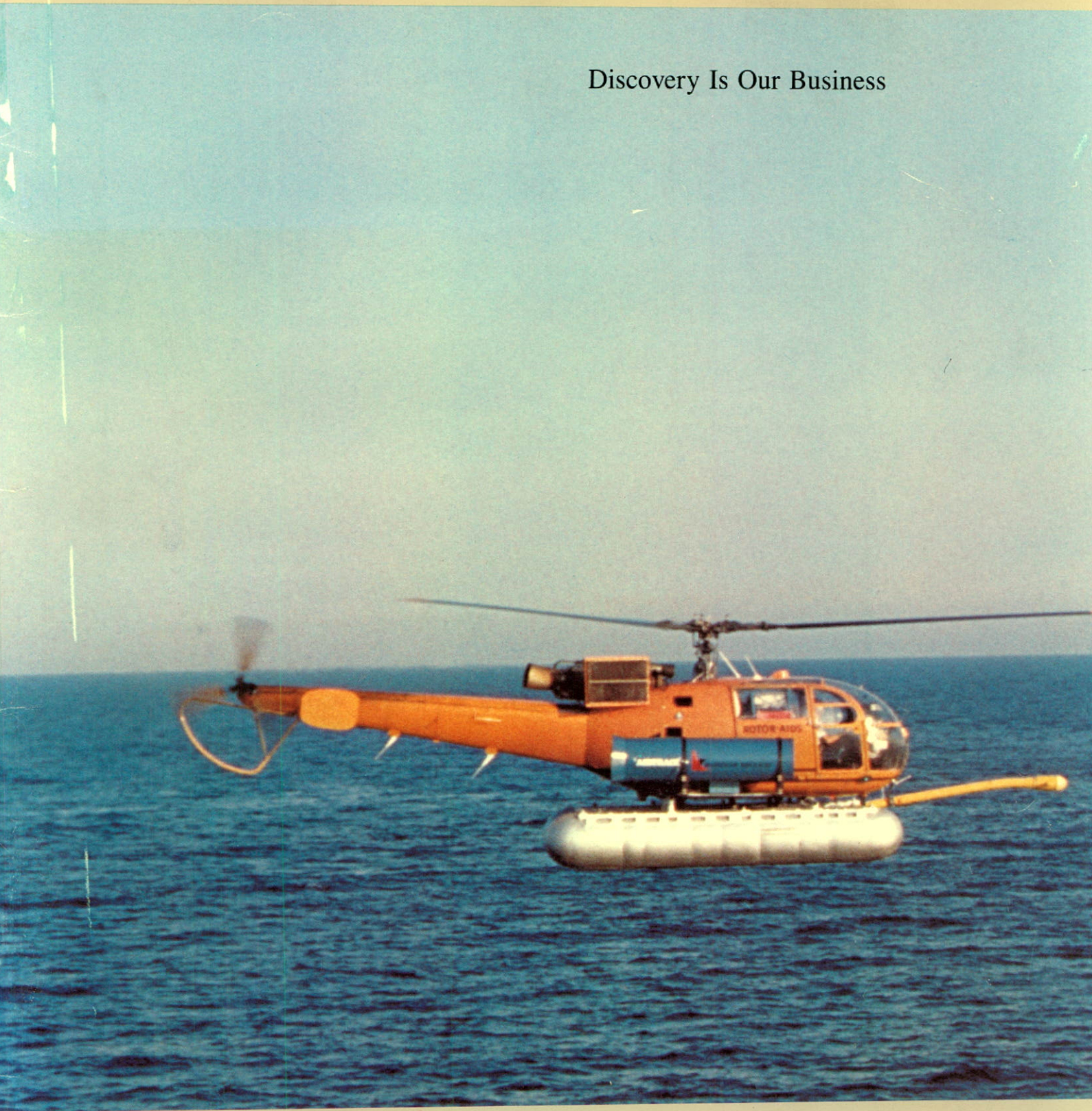


Discovery Is Our Business





## CORPORATE PROFILE

Barringer Resources Inc. is a high technology research and development and hydrocarbon and mineral exploration company utilizing the multi-disciplinary approach to exploration. These disciplines include geochemistry, electro-optics, electromagnetics, magnetics and atmospheric physics. The Company's research and development efforts have resulted in patented and proprietary instruments, instrument systems and techniques used in airborne and ground exploration, environmental monitoring, process control and metal detection. Currently, the areas of greatest interest are the use of ground geochemistry, identification of hydrocarbons offshore, electromagnetic airborne identification of hydrocarbons and minerals onshore, and the development of analytical techniques and high technology products with multiple market uses. As a high technology company, Barringer's growth and future worth should be measured by its ability to accumulate long-term revenue streams earned through its past, current and potential exploration and research efforts.

## CORPORATE GOALS

- To become recognized as one of the premier companies in the world utilizing the multi-disciplinary approach to exploration.
- To use the team approach combining leading edge technology with imaginative business approaches to maximize innovation.
- To utilize earnings to further develop our hydrocarbon and minerals assets and strengthen our research and development efforts.
- To achieve long-term success through the skills and imagination of our quality personnel.



About The Cover:  
*Helicopter carrying various Barringer exploration instruments in equipment test flight over oilfield off California coast. Instruments were designed by Barringer to explore for hydrocarbons in offshore environments and are under development as a part of the British Petroleum research and development joint venture.*



## REPORT TO SHAREHOLDERS

In the last several reports to you, we have stressed Barringer's increasing momentum in oil and gas exploration and research and development activities. In this regard, we believe that 1983 was a significant year in several important ways.

Through consummation of the joint venture agreement signed with British Petroleum in January 1983, your Company was able to significantly increase its funding for the development of both its proprietary onshore and offshore systems for finding hydrocarbons, including more recently, "SEASCAN", which utilizes a variety of technologies. Additionally, we will continue to benefit from British Petroleum's developing use of our technology in that we will share technological results with them and have the opportunity to enter into joint exploration activities with third parties which directly benefit Barringer itself.

In that regard, at the end of 1983, several exploration programs were underway and we have also aggressively begun to market both our onshore and offshore technologies.

Our onshore hydrocarbon exploration activities within the Continental United States continued in 1983. Although we have not yet achieved significant commercial success, we were nevertheless pleased with the technical progress we made in 1983. Our first commercial well, discovered in late 1982, was brought on-stream in January 1983 and has produced 44,000 gross barrels (1,100 barrels net to Barringer) to date. Further, nearly every well drilled in conjunction with our proprietary technology reached total depth with shows of oil and gas despite technical problems preventing the completion of several of these wells. It is becoming more evident that our proprietary technology identifies the presence of hydrocarbons. In 1984, we will continue to refine these techniques and to more closely combine conventional geological and geophysical techniques with our technology, both to identify promising targets and to increase the probability of success in finding hydrocarbons within those target areas.

With regard to our minerals exploration activities,



*Gary M. Cook, President and Chief Operating Officer, and Dr. Anthony R. Barringer, Chairman and Chief Executive Officer.*

we were most pleased with the continued development of our Auritech joint venture with PNC, plc of London (now a wholly owned subsidiary of Universal Fuels Corporation, Denver, Colorado). It is through Auritech that an exploration agreement covering an initial one million acres in Nevada and southern California with a right to subsequently lease up to approximately 200,000 acres was signed in December 1982 with Southern Pacific Land Company. Utilizing a combination of indirect detection techniques, we identified 21 promising geochemical anomalies and conducted scout drilling on four of these. The drilling operation confirmed the presence of precious metals. Our efforts in 1984 will be directed toward identifying the possibility of commercial ore bodies within these anomalies.

We are pleased to announce that in February 1984, Southern Pacific and Auritech agreed to begin exploration of additional acreage in Nevada under essentially the same terms and conditions as the previous agreement with Auritech having the right to lease up to approximately 200,000 acres.





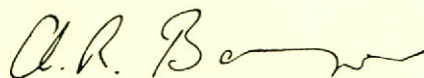
In November 1983, the Board of Directors appointed Dr. Anthony R. Barringer Chairman and Chief Executive Officer of the Company and Mr. Gary M. Cook, President and Chief Operating Officer as well as a Director of Barringer Resources Inc. Mr. Cook was previously a director of the Company. The Board noted that Mr. Cook's considerable business and commercial background will allow Dr. Barringer to focus his energies more directly upon continued exploration and exploration research activities. This team approach should enable your Company to successfully market both its exploration and research and development programs at a more rapid rate.

We are also pleased to announce that in October 1983, Dr. Walter Morris, formerly Chief Executive Officer of TIW Industries, Ltd., was appointed Chief Executive Officer of Barringer Magenta Ltd., a wholly-owned Canadian subsidiary. Dr. Morris will primarily be responsible for expanding your Company's mineral exploration efforts in Canada and identifying other related business opportunities.

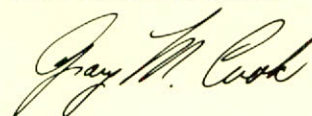
Subsequent to the end of 1983, the Canadian government implemented new income tax incentives for research and development

companies. As a result, Barringer Research Ltd., a wholly-owned subsidiary, was able to effectively sell tax credits pertaining to research and development expenditures for approximately \$1 million (Canadian) by renouncing the deductibility of certain research and development costs. To avoid incurring an income tax liability, Barringer Research will utilize other carryforward deductions it currently has available.

Based upon the above events, as well as marginal signs of a rebound in mineral and hydrocarbon exploration in North America, we believe that 1984 and the following years provide a bright future for the application of our technology in hydrocarbons and minerals exploration, and in other markets as well.



Dr. Anthony R. Barringer  
Chairman of the Board and  
Chief Executive Officer



Gary M. Cook  
President and Chief  
Operating Officer





## CURRENT ACTIVITIES

### Background Information

Barringer Resources Inc. was founded in 1961 as a high technology research and development company to undertake projects that lead to the development of patented or proprietary products and services which are based upon the integration of multiple scientific disciplines. The major but not exclusive emphasis of the Company's work has been on exploration and the earth sciences. Projects are funded by third parties when possible. Our staff of scientists and engineers are experts in the fields of geology, geochemistry, electromagnetics, electro-optics, magnetics, analytical chemistry, atmospheric physics and instrumentation design.

This unique concept of integrating diverse disciplines has enabled Barringer to develop a wide range of instruments and techniques for the measurement, recording and analysis of geophysical and geochemical data that have applications in oil and gas and minerals exploration as well as specialized instruments and analytical techniques for the environmental sciences.

The Company has 19 United States patents and one patent pending relating to its equipment and systems. In addition, it has an aggregate of 130 patents issued and 31 patent applications pending in countries other than the United States. Although Barringer regards its patents and patent applications to be of substantial value, it does not deem its business as a whole to be materially dependent on them.

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 exploration activities in northern climates.

As of December 31, 1983, there were 111 persons, including officers, employed by the Company.

### Research and Development

For the past several years, Barringer has committed a significant portion of its resources and efforts toward developing instruments, techniques and interpretive methods to explore for oil and gas and precious metals. Funding for such programs comes predominantly from third parties, primarily from oil exploration and mining companies as well as governmental agencies. Research and development contracts are generally entered into on a cost reimbursement plus fee basis with Barringer retaining



*During 1983, Barringer further developed and sold two of its REFSPEC® instruments to the Peoples Republic of China. REFSPEC® measures the detailed reflectance spectra of minerals and vegetation.*

the right to use the developed technology for its own account.

The following research and development projects were conducted in 1983 and/or are currently underway:

On January 26, 1983, the Company entered into an agreement with British Petroleum of London (BP) in which BP acquired the right to use certain onshore and offshore oil and gas exploration technologies developed by Barringer in consideration for \$2 million. Barringer maintained the right to use the technologies for its own benefit. BP also agreed to continue the joint development of the technology by providing approximately \$1 million per year on a contingent basis for three years with no obligation by Barringer to provide additional funds. During 1983, research and development under this program totalled \$1.1 million. In addition, BP recently agreed to continue its funding under this agreement for 1984 for approximately \$1 million. BP may be considered a significant customer of Barringer.

Through this agreement, Barringer was able to substantially increase its funding for the development of both its proprietary onshore systems for finding hydrocarbons and offshore systems used for rapid





reconnaissance to detect the presence of hydrocarbon anomalies and potential oil and gas fields.

The COTRAN® (COrrelation of TRANsients) System, an airborne mineral proprietary system, continued in development during the year with the latest series of test flights being completed in December. Further improvements in both computer hardware and software have significantly advanced the performance of COTRAN and were evident in these test flights. Together with Elf Aquitaine, our partner in the development of COTRAN, Barringer is planning further test flights in the spring of 1984. In general, the depressed conditions in the mining industry have kept development work down to a relatively low level but the Company is convinced it has a powerful technology available for such time as a resurgence in mineral exploration occurs.

The TIVAC™ airborne geophysical/geochemical system, designed primarily for oil and gas exploration, is based upon the use of multi-parameter remote sensing methods to detect hydrocarbon leakage over oil and gas deposits. Development continued during 1983 with approximately \$350,000 of funding provided primarily by the National Research Council of Canada.

Several other programs are underway in Barringer's Canadian research and development laboratories which pertain to national defense and cover a broad spectrum of scientific disciplines. In addition, development of an advanced field reflectance spectrometer (REFSPEC) was completed in 1983 and now complements the Hand Held Ratioing Radiometer in our line of commercial products. Two REFSPEC's were sold to the Peoples Republic of China in 1983 and interest from other parties is encouraging.

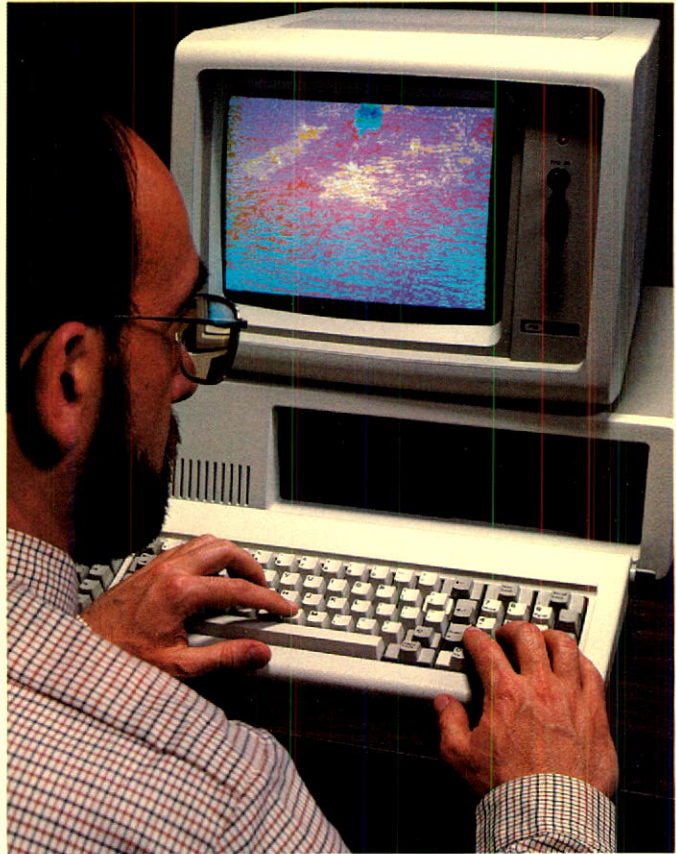
While there are no other companies that compete directly with Barringer in its proprietary exploration techniques in the earth sciences field, some companies have other geophysical methods that are competitive in the mineral and oil and gas exploration markets.

As of December 31, 1983 and 1982, the Company had a backlog of approximately \$1,565,000 and \$538,000, respectively, of research work on hand. It is estimated that substantially all of the backlog will be completed by December 31, 1984.

## Exploration

### Oil and Gas

Under terms of various agreements, the Company



*An important aspect of Barringer's research and exploration capability is image processing and data integration, which enhance data through the use of advanced computer technology.*

used its proprietary oil and gas techniques in 1983 to conduct exploration programs over properties owned by others in Colorado, Kansas and Wyoming. The results of these specialized surveys were provided to the operators who in turn selected drillsite locations using conventional techniques as well as the Barringer data. Barringer was paid aggregate fees of approximately \$734,000 for providing its technology and earned an interest in the properties upon discovery of hydrocarbons. In some instances, the Company elected not to continue in certain exploration programs after determining that its survey results indicated limited potential within the area explored. This systematic screening of potential oil and gas prospects has been and will continue to be an integral part of Barringer's exploration strategy to select only the most promising exploration prospects.

Twelve wells were drilled in 1983 under these exploration programs and hydrocarbon shows of varying magnitude were detected in each well. Completion was attempted in four wells and operations





were suspended in two additional wells pending the outcome of the completion attempt on one of the four wells. At February 17, 1984, completion was still in process on all six wells. In three of the wells, Barringer's participation was dependent upon the continued participation of its exploration partner who, unfortunately, elected not to contribute towards the completion attempts.

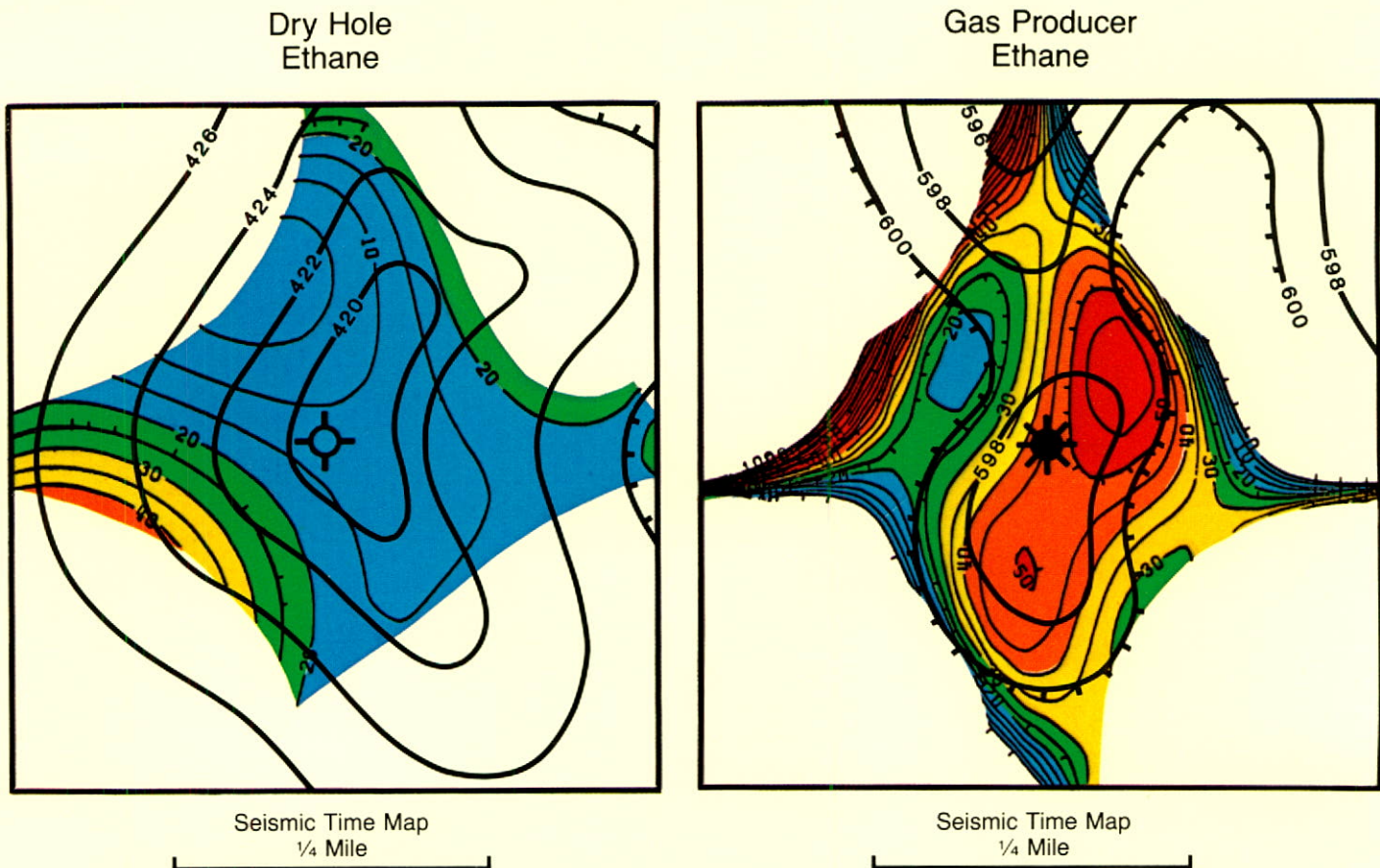
The Company also participated as a working interest owner in two joint ventures which drilled seven prospects in the Illinois Basin in 1983. While no wells resulted in commercial production, hydrocarbons were found in all but one well. In addition, two other joint ventures were in process at December 31, 1983 with geochemical and geophysical evaluations underway. Drilling activities are not planned until the spring of 1984.

Although the Company has not yet developed significant oil and gas reserves, it is nevertheless

pleased with the technical progress made in 1983 and plans to continue to develop and refine its various geochemical and geophysical exploration techniques. In order to concentrate its efforts on the most promising oil and gas prospects, the Company anticipates it will more closely integrate conventional geological and seismic exploration methods with its proprietary exploration techniques in 1984.

At December 31, 1983, the Company had commitments of approximately \$45,000 for its share of estimated costs in joint exploration programs and a backlog of work to be performed of \$308,000.

Barringer 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. Many of the



An example of how geochemistry works in combination with geophysics to improve drilling success, these illustrations compare geochemical results determined prior to drilling to a seismic interpretation for a gas producer and a dry hole in a Kansas exploration program.





companies engaged in oil and gas exploration possess larger technical staffs, greater financial resources and more experience than the Company, although they do not necessarily use the same type of technology.

## Minerals

In November 1982, Barringer entered into a joint venture, Auritech, with PNC, plc of London to explore for precious metals in North America and Mexico. Through Auritech, the Company signed a combination exploration and lease option agreement in December 1982, with Southern Pacific Land Company of San Francisco. During 1983, using advanced remote sensing and geochemical technology, Auritech conducted aerial and ground reconnaissance over approximately one million acres of lands owned by Southern Pacific and identified 21 anomalies. In the fall of 1983, scout drilling was conducted on four of these anomalies with direct evidence of precious metals found in 18 drill holes. Although the drilling results are not yet conclusive of the presence of commercial quantities and grades of ore, they are nevertheless very encouraging. Auritech is presently seeking a third party participant to share in its future additional drilling and exploration costs on each of these anomalies. During 1984, Auritech's efforts will primarily be directed towards the continued development of these anomalies.

Under the terms of the agreement, Southern Pacific has the right to re-acquire up to a 50% working interest in the properties by reimbursing Auritech for a portion of its past exploration costs or electing to pay an equivalent amount of future costs.

Through a non-consent clause in the Auritech joint venture agreement, Barringer is under no financial obligation to provide funds to Auritech for its exploration programs and is entitled to full reimbursement of all costs incurred on behalf of Auritech. Such reimbursements approximated \$1.7 million in 1983 and are included in the Company's operating revenues. Auritech may be deemed to be a significant customer of the Company. Due to its election not to fund the exploration program, Barringer's interest in the mineral properties acquired under the exploration agreement with Southern Pacific, once recovery of all costs has been made by PNC, has been reduced from an equal undivided interest to 25%.

During 1983, the Company re-evaluated a number of its minerals exploration targets in Canada which resulted from a previous joint venture exploration program. As a result of this review, approximately 25 square miles of lands were staked in northern



*Through its joint venture, Auritech, Barringer drilled 18 test holes in Nevada in 1983 to confirm the presence of precious metals located by various geochemical and geological exploration techniques.*

Manitoba which Barringer believes to be favorable for gold mineralization. The exploration concept used in the selection of this potentially mineralized zone was similar to that used in another Canadian joint venture program managed by Barringer in the early 1970's which led to the creation of Royex Sturgex Mining, Ltd. in which Barringer still holds more than 367,000 shares of common stock. Barringer is presently in final negotiations with a prospective partner to initiate a substantial exploration program in 1984 which will lead to the drilling of the best targets. This significant exploration opportunity will further strengthen the Company's direct involvement in exploration activities.





## 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 and development programs.

Numerous other companies are engaged in the manufacture of geophysical instruments that compete with the instruments manufactured by Barringer. Although there are other pollution monitoring devices available on the market which compete with the Company's instruments, Management believes that they do not provide the advantages made available by the Company's patented electro-optical methods. Barringer is not, however, a major manufacturer of pollution monitoring devices.

As of December 31, 1983 and 1982, the Company had a backlog of \$68,000 and \$150,000, respectively, of instrument manufacturing work on hand. It is estimated that all such backlog will be completed by December 31, 1984.

## Minerals—Systems Licensing and Analytical Services

A portion of the Company's income comes from the licensing and leasing of the INPUT® (INDuced PULSE Transient) system, an original development of Barringer that is the only commercial airborne electromagnetic mineral prospecting system to use a pulsed field principle. INPUT is licensed on an exclusive basis to Geoterrex Ltd. of Ottawa and Questor Surveys Ltd. of Toronto and is used worldwide for mineral exploration surveys. A royalty is paid to the Company for every line mile of production survey carried out by each licensee. In addition, lease payments are made on the equipment. Since 1967, 24 orebodies have been discovered for clients using INPUT. INPUT royalties were \$336,000, \$275,000 and \$417,000 for 1983, 1982 and 1981, respectively, with the decline during 1982 attributable largely to the downturn in minerals exploration activities worldwide.

Barringer has also developed airborne, ground geophysical and geochemical methods for minerals exploration that are used primarily to detect deeply buried mineral deposits. In the past, the Company principally operated on a contract basis in its minerals exploration activities. Today, Barringer generally seeks to earn an economic interest in any mineralization



*Employees of The United States Geological Survey utilize Barringer's COSPEC to monitor carbon dioxide and sulphur dioxide escaping from Mt. St. Helens. These measurements proved useful in predicting past eruptions from such volcanic activity. (Photo courtesy of The United States Geological Survey.)*

discovered under its exploration programs. Utilizing its proprietary techniques and instrumentation, in addition to conventional methods, the Company also provides extensive analytical services to the minerals industry.

Barringer operates four custom analytical laboratories in Toronto, Ontario; Wheat Ridge, Colorado; Calgary, Alberta; and Sparks, Nevada. These laboratories conduct assay, geochemical and environmental analyses for a broad range of customers. In addition, the Toronto laboratory has expanded its capabilities to include organic analyses including industrial hygiene and occupational health services. All laboratories are computer based 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 analytical results in the Company's computer data base.

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, 1983 and 1982, Barringer had a backlog of \$113,600 and \$520,000, respectively, of laboratory work on hand. It is estimated that all such backlog will be completed by December 31, 1984.





## Investment in Royex Sturgex Mining Limited

The Company's investment in 367,465 shares of common stock of Royex Sturgex Mining Limited, a Canadian company traded on the Toronto Stock Exchange, is carried at \$803,600 or \$2.19 per share, while the market value of the stock at February 17, 1984 was \$6.23 per share, giving a net market value to the Company's holdings of \$2.3 million.

Royex owns a 40% interest in Cullaton Lake Gold Mines Ltd. Royex and Cullaton are also joint venture partners in the Cullaton Lake gold mine, which was brought into commercial production during 1982. In December 1983, Cullaton Lake reported on its newly discovered Shear Lake ore body which is adjacent to the Cullaton Lake gold mine; surface drilling indicates that there are at least one million tons of ore with grades between 0.2 and 0.83 ounces of gold per ton. Plans are underway which call for production at 400 tons per day with output being processed at the nearby Cullaton Lake Mill.

Royex also announced in December 1983 that it will acquire up to 17% of International Corona Resources Ltd. of Vancouver, the company that has been credited with the major discovery of the Hemlo gold field in northern Ontario. International Corona maintains a 45% carried working interest in certain properties that have reported estimated reserves of 3.3 million ounces of gold.

In June 1983, Royex completed its acquisition of the



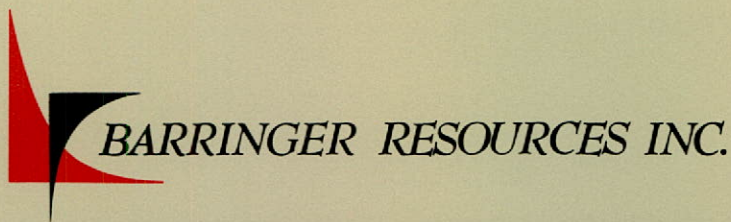
*Barringer's analytical laboratories offer environmental, organic and multi-element analyses. Shown here is an atomic absorption spectrometer which provides metallurgical and assay evaluations for the minerals industry.*

world's largest emerald mine, the Gravelotte Emerald Mine in Eastern Transvaal in South Africa. Royex assumed control of the mine on February 1, 1984.

These developments are significant for Royex and, in the opinion of Management, considerably increase the potential value of Barringer's holdings.







## FINANCIAL HIGHLIGHTS

(in thousands except per share data)

Consolidated Statements of Operations	Year ended December 31				
	1983	1982	1981	1980	1979
Sales of goods & services .....	\$8,555	\$5,579	\$6,484	\$5,868	\$4,957
Income (loss) before extraordinary credit .....	316	(2,379)	(1,926)	278	152
Net income (loss) .....	815	(2,379)	(1,852)	498	460
Income (loss) per share before extraordinary credit .....	.15	(1.21)	(.99)	.14	.08
Net income (loss) per share .....	.38	(1.21)	(.95)	.26	.25

Consolidated Balance Sheets	December 31				
	1983	1982	1981	1980	1979
Working capital, net .....	\$2,097	\$ 794	\$3,071	\$ 868	\$ 910
Total assets .....	5,901	5,655	7,528	4,686	3,346
Long-term obligations .....	3,912	4,044	4,360	104	182
Shareholders' equity (deficit) .....	436	(465)	1,443	3,144	2,145

## MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

### Capital Resources and Liquidity

Barringer is a high technology research and development company that believes in a team approach to the development of its business, combining leading edge technology in many disciplines, with imaginative commercial and business approaches to maximize the value of Barringer's innovations. Accordingly, future earnings will be utilized to further develop the underlying values of the Company's assets and to strengthen its research and development efforts. Barringer believes in the quality of its personnel and that its long-term success will move in tandem with the development of their skills and imagination. Barringer also believes in a multi-disciplinary approach to exploration and innovation and, in that regard, seeks recognition as one of the premier high-technology companies in the world through the application and utilization of its proprietary instruments, techniques and interpretative methods and high-technology products that have multiple market uses.

As discussed under "Research and Development," in January 1983 Barringer entered into an agreement with British Petroleum (BP) of London in which BP acquired the right to use certain oil and gas exploration technology developed by Barringer for \$2 million and agreed to further develop the technology by providing approximately \$1 million for each of the subsequent three years. After spending approximately \$1.1 million in 1983, BP recently agreed to

continue funding the program for an approximate \$1 million in 1984.

In February 1984, Barringer renounced certain research and development expenditures for Canadian income tax purposes and effectively sold the related tax benefits to third parties for approximately \$1 million (Canadian). This transaction was made possible by recent changes in Canadian income tax law to stimulate research and development activities in Canada. To avoid incurring an income tax liability, the Company will utilize certain tax carryforward deductions and credits it currently has available. Proceeds from this transaction have been invested in short-term cash investments.

Working capital was \$2,097,615 at December 31, 1983, up approximately \$1,303,000 from December 31, 1982 due principally to the receipt of funds under the January 1983 contract with BP of \$2 million and \$777,000 received from the sale of 119,800 shares of common stock of Royex-Sturgess less \$1,131,000 used in other operations (including \$524,000 of interest on debentures and expenditures of \$279,000 in connection with oil and gas exploration programs) and \$205,000 for purchases of other property and equipment.

At December 31, 1983, the Company held short-term cash investments of \$1,020,000. At February 17, 1984, these investments were increased to





\$1,399,000 due to receipts on the sale of research and development expenditures less \$421,000 used for working capital requirements, including \$262,000 of interest paid on debentures.

The Company had \$233,000 available under its short-term lines of credit at December 31, 1983. The lines of credit are collateralized by a general lien on the Company's Canadian assets up to \$800,000, an assignment of accounts receivable and \$260,000 of short-term cash investments.

The value of the Company's investment in 367,465 shares of common stock of Royex-Sturgex Mining Ltd. is significantly in excess of its carrying value. At February 17, 1984, this investment had an aggregate market value of approximately \$2.3 million or \$6.23 per share. The Company's carrying value is \$803,000 or \$2.19 per share. Because of limited trading activities, no assurance can be given that the quoted market value is indicative of realizable value.

## Results of Operations

Overall, the Company's operations improved in 1983 when compared to 1982 and 1981 primarily due to the agreement reached with British Petroleum. In addition, much of the Company's idle exploration capacity in 1982 was utilized in 1983 in conjunction with providing exploration services to Auritech (the joint venture between Barringer and PNC, plc of London) under the exploration and lease option agreement with Southern Pacific Land Company. Improvements in economic conditions in general together with margin improvements in hydrocarbons and minerals exploration activities in particular resulted in improved performance in the Company's instrument sales and analytical service laboratories.

**Sales of Goods and Services.** Refer to Note 12 of Notes to Consolidated Financial Statements for an analysis of revenues by principal activities. Research and development revenues from funded programs increased slightly in 1983 when compared to 1982. Increases, including \$1.1 million billed in 1983 under the British Petroleum program, were offset by reductions in revenues under an agreement with Petro-Canada Exploration Ltd. (PEX) whereby PEX, until March 1, 1983, together with the National Research Council of Canada (NRC), funded the development of TIVAC, an airborne oil and gas exploration system. NRC provided \$350,000 of funds towards the development of TIVAC in 1983. Increases in R&D revenues in 1982 compared to 1981 are primarily attributable to the TIVAC development program. The significant increase in exploration revenues in 1983 is due primarily to approximately \$1.7 million billed to Auritech by Barringer as a reimbursement of costs incurred. Declines in manufactured instrument sales in 1983 and 1982 are a result of lower sales volumes of process control instruments used to monitor heavy water content of flow streams in nuclear reactors. Barringer is the supplier for the Canadian built CANDU nuclear reactor. Other declines in manufacture product sales resulted from reduced demand, particularly with respect to severely curtailed minerals exploration activities worldwide. Licensing and analytical service revenues declined in 1983 and 1982 due to the depressed minerals exploration industry. The Company experienced a slight improvement in its licensing and analytical service revenues in 1983 as conditions in the minerals industry stabilized.

**Sale of Technology.** The sale of technology relates to the agreement signed with British Petroleum in 1983. Refer to Note 2 of Notes to Consolidated Financial Statements.

**Gain on Sale of Investments.** The gain in 1983 relates to the sale of 119,800 shares of common stock of Royex-Sturgex Mining Ltd. Refer to Note 4 of Notes to Consolidated Financial Statements.

**Cost of Goods and Services Sold and Gross Margins.** Cost of goods and services sold increased in 1983 over 1982 and decreased from 1981 to 1982 corresponding to fluctuations in sales of goods and services. Gross margins were 19.3%, 14.8%, and 19.7% in 1983, 1982 and 1981, respectively. The decline from 1981 to 1982 reflects a higher proportion of funded research and development activities which are generally less profitable to the Company. Additional decreases in gross margins were due to increased idle capacity related to generally poor economic conditions and the worldwide curtailment of minerals exploration activities. Improvements in gross margins in 1983 reflect cost savings measures implemented by Management and higher levels of productivity primarily related to exploration services in conjunction with work performed under the Auritech joint venture exploration program with Southern Pacific Land Company.

**Research and Development.** These expenses represent 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. Research and development activities in 1983 and 1981 were primarily directed towards the development of techniques for oil and gas exploration and in airborne minerals exploration system (COTRAN) and new products for instrument manufacture and sale. Lower research and development activities in 1982 reflect reductions in unfunded costs due principally to cost savings measures undertaken by Management as a result of poor economic conditions.

**Exploration Expense.** Exploration expenses in 1981 primarily relate to geochemical and seismic costs incurred under various exploration programs including \$355,000 invested in oil and gas leasehold interests in Arizona. Exploration expenses in 1982 and 1983 pertain to exploration programs, including drilling costs, whereby the Company was not successful in obtaining proved interests in oil and gas properties upon interpreting the results of the related exploration programs. In 1983, the Company elected to change its method of accounting for interests in oil and gas properties from "full cost" to "successful efforts". Refer to Note 1 of Notes to Consolidated Financial Statements.

**General and Administrative.** Decreases in 1983 are primarily attributable to cost savings measures undertaken by Management. Increases in 1982 over 1981 resulted from the hiring of additional personnel, expansion of U.S. and Canadian plant facilities in late 1981, higher professional services for outside business consultants and legal fees and amortization of deferred financing costs related to the issuance of debentures. In January 1984, the Company terminated all litigation with Intex, Inc., a licensee under certain patents relating to "walk through" metal detection devices used for airport security. Under the terms of the settlement, the validity of Barringer's patents was upheld and all claims and counterclaims between the parties were dropped with no awards made for damages or reimbursement of legal costs. The Company expects to save approximately \$200,000 in 1984 legal fees as a result of the settlement.

**Interest.** Interest expense decreased in 1983 when compared to 1982 primarily due to the conversion in late 1982 and early 1983 of approximately \$700,000 of 12½% convertible subordinated debentures. Increases in 1982 over 1981 primarily relate to the debentures being outstanding for a full 12 months in 1982 as compared to six months in 1981.

**Income Taxes.** The income tax provisions in 1981 and 1983 represent charge and credit equivalents to the utilization of prior years operating losses. Refer to Note 10 of Notes to Consolidated Financial Statements for additional information on carryforward deductions and credits available to the Company in future years.





## CONSOLIDATED STATEMENTS OF OPERATIONS

For The Years Ended December 31, 1983, 1982 and 1981

	1983	1982	1981
Revenues			
Sale of goods and services .....	\$6,555,154	\$ 5,578,747	\$ 6,484,302
Sale of technology (Note 2) .....	2,000,000	-	-
Interest .....	100,103	144,024	203,138
Gain on sale of investments (Note 4) .....	777,318	-	57,813
	<u>9,432,575</u>	<u>5,722,771</u>	<u>6,745,253</u>
Costs and expenses			
Cost of goods and services sold .....	5,290,699	4,750,653	5,208,880
Research and development .....	507,816	147,124	663,259
Exploration expense .....	278,787	399,185	669,700
General and administrative .....	1,819,837	1,984,980	1,658,177
Interest .....	614,381	758,990	412,683
Other .....	105,605	60,542	(15,167)
	<u>8,617,125</u>	<u>8,101,474</u>	<u>8,597,532</u>
Income (loss) before income taxes and extraordinary credit .....	815,450	(2,378,703)	(1,852,279)
Provision for income taxes (Note 10) .....	499,000	-	74,000
Income (loss) before extraordinary credit .....	316,450	(2,378,703)	(1,926,279)
Extraordinary credit equivalent to tax benefit from utilization of operating loss carryforwards (Note 10) .....	499,000	-	74,000
Net income (loss) .....	<u>\$ 815,450</u>	<u>\$(2,378,703)</u>	<u>\$(1,852,279)</u>
Per share data			
Income (loss) before extraordinary credit .....	\$ .15	\$ (1.21)	\$ (.99)
Extraordinary credit .....	.23	-	.04
Net income (loss) .....	<u>\$ .38</u>	<u>\$ (1.21)</u>	<u>\$ (.95)</u>
Weighted average shares outstanding .....	<u>2,138,679</u>	<u>1,972,010</u>	<u>1,952,183</u>

See notes to consolidated financial statements.





## CONSOLIDATED BALANCE SHEETS

As of December 31, 1983 and 1982

Assets	<u>1983</u>	<u>1982</u>
Current assets		
Cash and temporary cash investments (Note 6) .....	\$1,085,794	\$ 901,460
Receivables (Note 6)		
Trade, less allowance for doubtful accounts, 1983-\$19,126; 1982-\$93,808 .....	1,696,671	1,059,550
Selling price of contracts in process, less billings .....	279,084	171,151
Inventories (Note 3) .....	330,749	479,570
Deposits, advances and prepaid expenses .....	67,099	65,394
Total current assets .....	<u>3,459,397</u>	<u>2,677,125</u>
Investments (Note 4) .....	808,897	818,021
Interests in oil and gas properties, at cost		
determined by successful efforts method .....	44,262	34,452
Plant, property and equipment, net (Note 5) .....	1,322,463	1,867,164
Patents and trademarks, at cost less accumulated amortization		
of \$114,789 in 1983 and \$54,696 in 1982 .....	131,332	185,262
Other .....	134,669	72,879
	<u>\$5,901,020</u>	<u>\$5,654,903</u>
<b>Liabilities and Shareholders' Equity</b>		
Current liabilities		
Bank indebtedness (Note 6) .....	\$ 202,875	\$ 741,655
Current portion of capital lease obligations (Note 7) .....	69,973	66,762
Accounts payable and accrued liabilities .....	736,705	737,517
Accrued interest .....	240,109	246,316
Excess of billings over selling price of contracts in process .....	112,120	90,610
Total current liabilities .....	<u>1,361,782</u>	<u>1,882,860</u>
Long-term debt (Note 8) .....	3,758,498	3,819,606
Obligations under capital leases (Note 7) .....	153,592	224,328
Deferred income taxes (Note 10) .....	190,935	193,359
Total liabilities .....	<u>5,464,807</u>	<u>6,120,153</u>
Commitments and contingencies (Notes 6 and 7)		
Shareholders' equity (deficit) (Notes 8 and 9)		
Common stock, \$0.01 par value, 10,000,000 shares authorized;		
issued, 1983-2,295,689 shares and 1982-2,262,214 shares .....	22,957	22,622
Class B-common stock, \$0.01 par value, 100,000 shares authorized		
1983-25,000 shares issued and outstanding .....	250	-
Additional paid-in capital .....	3,324,229	3,213,788
Accumulated deficit .....	(2,718,756)	(3,534,206)
Cumulative foreign currency translation adjustments .....	(91,316)	(68,053)
	537,364	(365,849)
Less: Common stock in treasury, at cost, 1983-224,250 shares,		
1982-197,000 shares .....	(22,151)	(20,401)
Due from officer/shareholder .....	(79,000)	(79,000)
	<u>(101,151)</u>	<u>(99,401)</u>
Total shareholders' equity (deficit)	<u>436,213</u>	<u>(465,250)</u>
	<u>\$5,901,020</u>	<u>\$5,654,903</u>

See notes to consolidated financial statements.





## CONSOLIDATED STATEMENTS OF CHANGES IN FINANCIAL POSITION

For the Years Ended December 31, 1983, 1982 and 1981

	1983	1982	1981
<i>From operations</i>			
Income (loss) before extraordinary credit .....	\$ 316,450	\$(2,378,703)	\$(1,926,279)
Items not involving funds			
Tax benefit from utilization of operating loss carryforwards .....	499,000	-	74,000
Depreciation and amortization .....	598,375	578,794	471,779
Reduction of carrying value of property and equipment .....	232,119	-	-
Working capital provided by (used in) operations .....	1,645,944	(1,799,909)	(1,380,500)
<i>Other sources of funds</i>			
Issuance of 12½% subordinated convertible debentures, net of financing costs .....	-	-	4,382,897
Sale of common stock .....	19,200	37,375	2,250
Increase in capital lease obligations .....	-	273,643	-
Net book value of investments, property and equipment sold ..	12,384	159,365	64,781
	31,584	470,383	4,449,928
<i>Other uses of funds</i>			
Additions to interests in oil and gas properties .....	13,627	-	21,376
Purchases of plant, property and equipment .....	204,898	796,744	787,752
Reduction in long-term debt and capital lease obligations .....	74,805	116,572	8,352
Other, net. ....	80,848	33,815	48,649
	374,178	947,131	866,129
Increase (decrease) in working capital .....	1,303,350	(2,276,657)	2,203,299
Working capital, beginning of year .....	794,265	3,070,922	867,623
Working capital, end of year .....	\$2,097,615	\$ 794,265	\$3,070,922
Working capital-beginning of year .....	\$ 794,265	\$ 3,070,922	\$ 867,623
<i>Changes in components of working capital</i>			
Cash and temporary cash investments .....	184,334	(1,043,829)	1,938,796
Receivables .....	745,054	(594,494)	240,449
Inventories .....	(148,821)	(293,215)	337,812
Other current assets .....	1,705	12,754	(27,679)
Bank indebtedness .....	538,780	(354,548)	91,064
Accounts payable and accrued liabilities .....	812	37,289	(154,869)
Accrued interest .....	6,207	38,201	(284,517)
Other current liabilities .....	(24,721)	(78,815)	62,243
Increase (decrease) in working capital .....	1,303,350	(2,276,657)	2,203,299
Working capital-end of year .....	\$2,097,615	\$ 794,265	\$3,070,922
Funds represented by			
Current assets .....	\$3,459,397	\$ 2,677,125	\$4,595,909
Current liabilities .....	1,361,782	1,882,860	1,524,987
	\$2,097,615	\$ 794,265	\$3,070,922

See notes to consolidated financial statements.





# CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

For the Years Ended December 31, 1983, 1982 and 1981

	Common Stock		Class B Common Stock		Additional Paid-in Capital	Retained Earnings (Deficit)	Cumulative Foreign Currency Translation Adjustments	Common Stock in Treasury	Due from Officer/ Shareholder
	Shares	Amount	Shares	Amount					
Balance at January 1, 1981 as previously reported	2,141,464	\$21,415	-	\$ -	\$2,549,519	\$ 882,395	\$ -	\$ (20,401)	\$ (79,000)
Reduction of retained earnings (deficit) related to change in accounting for interests in oil and gas properties (Note 1)	-	-	-	-	-	(185,619)	-	-	-
Cumulative foreign currency translation adjustments related to change in accounting for foreign currency translation (Note 1)	-	-	-	-	-	-	(24,513)	-	-
Balance at January 1, 1981, as restated	2,141,464	21,415	-	-	2,549,519	696,776	(24,513)	(20,401)	(79,000)
Common stock issued through exercise of stock options	2,000	20	-	-	2,230	-	-	-	-
Common stock issued on conversion of 12½% subordinated convertible debentures	14,125	141	-	-	112,859	-	-	-	-
Foreign currency translation adjustments	-	-	-	-	-	-	35,784	-	-
Net loss	-	-	-	-	-	(1,852,279)	-	-	-
Balance at December 31, 1981	2,157,589	21,576	-	-	2,664,608	(1,155,503)	11,271	(20,401)	(79,000)
Common stock issued through exercise of stock options	30,500	305	-	-	37,070	-	-	-	-
Common stock issued on conversion of 12½% subordinated convertible debentures	74,125	741	-	-	512,110	-	-	-	-
Foreign currency translation adjustments	-	-	-	-	-	-	(79,324)	-	-
Net loss	-	-	-	-	-	(2,378,703)	-	-	-
Balance at December 31, 1982	2,262,214	22,622	-	-	3,213,788	(3,534,206)	(68,053)	(20,401)	(79,000)
Common stock issued through exercise of stock options	20,600	206	-	-	18,994	-	-	-	-
Common stock issued on conversion of 12½% subordinated convertible debentures	12,875	129	-	-	91,447	-	-	-	-
Exchange of common stock for Class B common stock (Note 9)	-	-	25,000	250	-	-	-	(250)	-
Purchase of treasury stock	-	-	-	-	-	-	-	(1,500)	-
Foreign currency translation adjustments	-	-	-	-	-	-	(23,263)	-	-
Net income	-	-	-	-	-	815,450	-	-	-
Balance at December 31, 1983	<u>2,295,689</u>	<u>\$22,957</u>	<u>25,000</u>	<u>\$ 250</u>	<u>\$3,324,229</u>	<u>\$(2,718,756)</u>	<u>\$(91,316)</u>	<u>\$ (22,151)</u>	<u>\$ (79,000)</u>

See notes to consolidated financial statements.





# 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:

Amounts reported in the consolidated balance sheet at December 31, 1982 and in the consolidated statements of operations for 1982 and 1981 have been retroactively restated to reflect the adoption of Statement of Financial Accounting Standards No. 52 "Foreign Currency Translation." Pursuant to Statement No. 52, assets and liabilities of Canadian subsidiaries are translated into U.S. dollars at the rates of exchange in effect at the balance sheet dates. Revenues and costs and expenses are translated at average rates of exchange for the year. Unrealized gains and losses are reflected as adjustments of shareholders' equity (deficit) and realized gains and losses are included in results of operations. The effect of the retroactive application of the change was to decrease the loss before extraordinary credit and the net loss previously reported for 1982 by \$10,843 (\$.01 per share) and increase the loss before extraordinary credit and the net loss previously reported for 1981 by \$18,073 (\$.01 per share). Had the Company not adopted Statement No. 52, operating results for 1983 would not have been materially effected.

Operations reflect realized (gains) losses on foreign exchange transactions of \$16,354, \$28,515 and \$(14,470) for 1983, 1982 and 1981, 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 or net realizable value.

### Patents and trademarks:

Patents and trademarks are carried at cost and are amortized over seventeen years which approximates their useful lives. Amortization amounted to \$70,719, \$15,980 and \$12,400 for 1983, 1982 and 1981, respectively.

### Interests in oil and gas properties:

In the fourth quarter of 1983, the Company changed from full cost to the successful efforts method of accounting for costs incurred in the acquisition, exploration and development of oil and gas properties. Amounts reported in the consolidated balance sheet at December 31, 1982 and in the consolidated statements of opera-

tions for 1982 and 1981 have been retroactively restated to reflect this change. Under the successful efforts method of accounting, all acquisition and development costs are capitalized. Costs of drilling exploration wells are initially deferred. If oil or gas is found in commercial quantities, the costs of these successful projects are capitalized. Costs of drilling unsuccessful exploration wells, geological, geophysical and geochemical costs and costs of carrying undeveloped properties are expensed. Proved and unproved properties are assessed periodically for impairment, and if impairment is indicated, a loss is recognized. Depletion of capitalized costs is provided using the unit-of-production method on a property-by-property basis. The effect of the retroactive application of the change was to decrease the loss before extraordinary credit and the net loss previously reported in 1982 by \$445,936 (\$.22 per share) and increase the loss before extraordinary credit and the net loss previously reported in 1981 by \$294,023 (\$.15 per share). Had the Company not adopted the change to successful efforts accounting, operating results for 1983 would not have been materially effected.

### Plant, property and equipment:

Plant, property and equipment are carried at cost. Depreciation of owned equipment 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.

### Income taxes:

The Company files United States income tax returns on a consolidated basis with its United States subsidiaries. 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 common shares and dilutive common share equivalents outstanding.

### Reclassifications:

Certain of the December 31, 1982 and 1981 amounts have been reclassified to conform to the December 31, 1983 financial statement presentation with no effect on previously reported net loss.





## 2. Agreement with British Petroleum

On January 26, 1983, the Company entered into an agreement with British Petroleum of London (BP) in which BP acquired the right to use certain onshore and offshore oil and gas exploration technologies developed by Barringer in consideration for \$2 million. Barringer maintained the right to use the technologies for its own benefit. BP also agreed to continue the joint development of the technology by providing approximately \$1 million per year on a contingent basis for three years. After spending approximately \$1.1 million in 1983, BP recently agreed to continue its funding under this agreement for 1984 for approximately \$1 million.

## 3. Inventories

Inventories consist of the following:

	December 31	
	1983	1982
Finished goods . . . . .	\$101,730	\$105,070
Work in progress . . . . .	181,322	327,835
Materials and supplies . . . . .	47,697	46,665
	<u>\$330,749</u>	<u>\$479,570</u>

## 4. Investments

Investments are as follows:

	December 31			
	Book Value 1983	Market Value 1983	Book Value 1982	Market Value 1982
Royex-Sturgex Mining Limited— 1983-367, 465 and 1982- 487,265 common shares . . . . .	\$803,600	\$2,436,200	\$813,800	\$1,982,700
Other investments . . . . .	5,297	No	4,221	No
	<u>\$808,897</u>	quoted value	<u>\$818,021</u>	quoted value

The Company's interest in the common shares of Royex at December 31, 1983 and 1982 is 4.7% and 13% respectively. Royex is traded on the Toronto Stock Exchange. The market value at February 17, 1984 was \$2,288,500. During 1983, the Company sold 119,800 shares of Royex at an average price per share of \$6.49 resulting in a gain of \$777,318. The gain on the sale of the common stock was computed using the specific cost of the shares sold.

## 5. Plant, Property and Equipment

The major categories of plant, property and equipment are as follows:

	December 31	
	1983	1982
Owned:		
Office furniture and equipment . . . . .	\$ 417,882	\$ 361,220
Plant, machinery and exploration equipment . . . . .	2,605,824	2,549,574
Equipment for lease . . . . .	104,805	417,876
Leasehold improvements . . . . .	586,574	587,324
	<u>3,715,085</u>	<u>3,915,994</u>
Accumulated depreciation and amortization . . . . .	2,630,348	2,346,144
	<u>1,084,737</u>	<u>1,569,850</u>
Held Under Capital Leases:		
Machinery and equipment (Note 7) . . . . .	410,642	413,945
Accumulated amortization . . . . .	172,916	116,631
	<u>237,726</u>	<u>297,314</u>
Total . . . . .	<u>\$1,322,463</u>	<u>\$1,867,164</u>

Depreciation and amortization was \$493,119, \$523,179 and \$431,845 for 1983, 1982 and 1981, respectively.

## 6. Bank Indebtedness and Guarantee

The Company has short-term lines of credit aggregating \$436,000 from various banks. At December 31, 1983, approximately \$203,000 was outstanding and approximately \$233,000 was available under these short-term lines of credit. These arrangements terminate and are reviewed annually for renewal.

At December 31, 1983, the short-term lines of credit were collateralized by a general lien on Canadian assets of up to \$800,000 (Canadian), accounts receivable and temporary cash investments of \$260,720.

On December 16, 1983, the Company agreed to guarantee a loan in the amount of \$100,000 from a bank on behalf of an officer. The Company has collateralized the guarantee with an interest bearing cash deposit of \$50,000.

## 7. Leasing Activities

Future minimum lease payments under capital leases are as follows:

Year ending December 31,	
1984 . . . . .	\$101,054
1985 . . . . .	75,585
1986 . . . . .	75,583
1987 . . . . .	38,204
1988 . . . . .	—
Minimum lease payments . . . . .	<u>290,426</u>
Less: Amount representing interest . . . . .	<u>66,861</u>
Present value of minimum lease payments at December 31, 1983 . . . . .	<u>\$223,565</u>





The Company rents office and laboratory facilities, automobiles and equipment under various operating leases. Rental expenses under such leases amounted to \$429,000, \$414,900 and \$404,700 for 1983, 1982 and 1981, respectively. At December 31, 1983, the aggregate minimum lease commitments for all operating leases are as follows:

Year ending December 31,	
1984.....	\$311,635
1985.....	128,797
1986.....	98,540
1987.....	73,924
1988.....	69,978
1989 and thereafter .....	88,087
	<u>\$770,961</u>

## 8. Long-Term Debt

Long-term debt consists of the following:

	December 31	
	1983	1982
12½% subordinated convertible debentures due July 17, 1996, annual sinking fund payments of \$470,000 commencing July 15, 1988, convertible at face amount into common stock any time before maturity at \$8.00 per share (523,875 shares of common stock reserved at December 31, 1983). .....	\$4,191,000	\$4,294,000
Less deferred financing costs .....	(432,502)	(478,464)
	<u>3,758,498</u>	<u>3,815,536</u>
Other, non-interest bearing	-	4,070
	<u>\$3,758,498</u>	<u>\$3,819,606</u>

The debentures are callable at a premium of 110.5%. The call premium declines at 1% per year through 1994 and is 100% thereafter. At its option, the Company may redeem up to an additional \$470,000 principal amount of debentures each July 15 commencing in 1988. 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. Payment of cash dividends is precluded under the terms of the indenture agreement until the Company has cumulative net income from December 31, 1980.

Costs relating to the debenture issue have been deferred and are being amortized over 15 years. Amortization was \$34,537, \$39,635 and \$18,856 for 1983, 1982 and

1981, respectively. Upon conversion of debentures into common stock a prorata portion of deferred financing costs were charged to additional paid-in capital.

## 9. Shareholders' Equity

### Class B Common Stock:

On May 11, 1983, the shareholders of the Company authorized a new class of common stock, designated Class B Common Stock, the holders of which are entitled to one hundred votes per share on all matters brought before the shareholders to vote. The shareholders also approved an exchange agreement between the Company and Dr. Anthony R. Barringer, Chairman, pursuant to which the Company exchanged 25,000 shares of the Class B Common Stock for a like number of shares of common stock owned by Dr. Barringer.

### Employment agreement:

Under the terms of an employment agreement with an officer effective October 24, 1983, the Company has agreed to issue 125,000 shares of common stock to the officer at fair market value in exchange for a promisory note for \$562,500. The note, which will be collateralized by the stock, will mature October 24, 1988 including interest at 8½% per annum. It is anticipated that the stock will be issued in early 1984. In exchange for an additional 25,000 shares of common stock, the Company has also agreed to acquire, in 1984, the officer's interest in Charter Investments, Inc., a company whose activities were primarily related to services performed by the officer as its principal employee. At a cost not to exceed \$30,000, the Company is required to use its best efforts to register the 150,000 shares described above with the Securities and Exchange Commission prior to October 1, 1984. Options to purchase 22,222 shares of common stock have been granted to the officer under the stock option plans described below. In addition, the Company has agreed to issue options to the officer to acquire an additional 55,947 shares of common stock in 1984 and future years. Also refer to Note 6.

### Stock Options:

The Company has stock option plans outstanding which originally reserved 740,000 shares of common stock. The plans have similar provisions whereby options are granted at fair market value at date of grant, are exercisable two years from date of grant provided optionee continues as a director or employee, and expire five years from date of grant. The Company retains a first right of refusal to purchase any of the shares purchased by optionees under options which were not registered under the Securities Act of 1933.

At December 31, 1983, options to purchase an aggregate of 372,622 shares at prices ranging from \$1.60 to \$7.625 were outstanding. Options to purchase 56,000 shares were exercisable at December 31, 1983. Options were exercised for 20,600 shares in 1983 at prices ranging from \$.75 to \$1.125; for 30,500 shares in 1982





at prices ranging from \$.75 to \$4.25; and for 2,000 shares in 1981 at \$1.125. There were 189,778 unoptioned shares at December 31, 1983 reserved for the granting of additional options under the plans.

The Company also grants stock options to consultants and its outside directors 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. At December 31, 1983, options to purchase 145,000 shares at prices ranging from \$1.125 to \$6.00 were outstanding, including 110,000 options granted to directors of the Company. At December 31, 1983, stock options to purchase 30,000 shares were exercisable by consultants.

#### Warrants:

Under the terms of an underwriting agreement covering the issuance of its 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 anytime through July 15, 1986 at an exercise price of \$8.80 per share of common stock.

#### Due from officer/shareholder:

In connection with the issuance of unregistered shares of common stock 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 quarterly.

## 10. Income Taxes

### U.S. income taxes:

There was no U.S. provision for income taxes in 1983 due to the utilization of net operating loss carryforwards available from prior years. Due to operating losses, there were no provisions for U.S. income taxes for years ended December 31, 1982 and 1981. At December 31, 1983, the Company had net operating loss carryforwards of \$2,895,000 for income tax purposes of which \$1,191,000 expires in 1996 and \$1,704,000 expires in 1997. The Company also has investment and foreign tax credit carryforwards of \$100,000 which expire in varying amounts through 1997.

### Canadian income taxes:

The Company has net operating loss carryforwards for income tax purposes of approximately \$100,000 (Canadian) that can reduce taxable Canadian income until 1987 and capital cost allowances (tax depreciation) and other deductions of approximately \$1,020,000 (Canadian) already expensed for book purposes that can be deducted for tax purposes at any future time. The Company also has investment tax credit carryforwards of \$296,000 that can be used to reduce future income taxes which expire in varying amounts through 1990. Also refer to Note 13, Subsequent Event.

### Reconciliation of income taxes:

A reconciliation of income taxes at United States statutory rate of 46% to the effective tax rate follows:

	1983	1982	1981
Income taxes (benefit) computed at the United States statutory rate .....	\$ 375,000	\$(1,094,000)	\$(852,000)
Losses with no tax benefit .....	302,000	1,094,000	935,000
Consolidated subsidiaries outside the United States			
Canadian inventory allowance .....	—	—	(8,000)
Non-taxable portion of capital gains .....	(178,000)	—	—
Tax rate differential on earnings .....	21,000	—	8,000
Other, net .....	(21,000)	—	(9,000)
Provision for income taxes .....	<u>\$ 499,000</u>	<u>\$ —</u>	<u>\$ 74,000</u>

## 11. Pension Plan

A Canadian subsidiary maintains a defined benefit 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 \$45,194, \$42,441 and \$40,783 for 1983, 1982 and 1981, respectively. As a

foreign pension plan, this plan is not required to report under ERISA and does not otherwise determine the actuarial value of accrued benefits. The net assets of the pension fund exceed vested benefits.





## 12. Information Concerning the Company's Principal Activities

A summary of the Company's operations by principal activity for the three years ended December 31, 1983, 1982 and 1981 follows:

	Total	Inter-Segment Eliminations	Research and Development	Exploration	Instrument Manufacture and Sale	Minerals Licensing & Analytical Services	Corporate
<b>1983</b>							
Revenues	\$9,432,575	\$(1,973,086)	\$2,490,291	\$2,604,044	\$ 554,396	\$2,661,552	\$3,095,378
Operating income (loss)	3,355,273	( 119,022)	177,187	(244,673)	101,296	660,763	2,779,722
General & administrative	1,819,837						
Interest expense and other	719,986						
Income before income taxes and extraordinary credit	815,450						
Depreciation and amortization	598,375	(4,661)	59,385	80,667	14,118	216,239	232,627
Capital expenditures	272,569	-	23,648	89,839	-	10,092	148,990
Identifiable assets	5,901,020	(1,208,554)	806,286	1,437,689	749,786	1,134,899	2,980,914
<b>1982</b>							
Revenues	\$5,722,771	\$(1,602,806)	\$2,328,433	\$1,281,371	\$ 771,992	\$2,622,546	\$ 321,235
Operating income (loss)	425,809	(171,810)	231,186	(366,687)	(129,408)	599,251	263,277
General & administrative	1,984,980						
Interest expense and other	819,532						
Loss before income taxes and extraordinary credit	(2,378,703)						
Depreciation and amortization	578,794	-	51,098	144,214	43,915	243,574	95,993
Capital expenditures	796,744	-	59,272	45,684	112,608	481,312	97,868
Identifiable assets	5,654,903	(740,848)	1,447,731	663,506	765,008	1,220,194	2,299,312
<b>1981</b>							
Revenues	\$6,745,253	\$(1,983,674)	\$1,603,279	\$1,976,778	\$1,269,404	\$3,611,287	\$ 268,179
Operating income (loss)	203,414	(105,840)	109,293	(870,621)	100,917	816,909	152,756
General & administrative	1,658,177						
Interest expense and other	397,516						
Loss before income taxes and extraordinary credit	(1,852,279)						
Depreciation and amortization	471,779	-	42,018	110,134	16,565	212,993	90,069
Capital expenditures	809,128	-	83,754	170,638	65,245	276,151	213,340
Identifiable assets	7,528,360	(191,570)	828,396	726,126	1,190,932	1,532,446	3,442,030

Amounts shown for 1982 and 1981 have been restated from previously reported segment data to reflect separate identification of the Exploration segment, which was previously combined with Minerals Licensing and Analytical Services, and to separately identify inter-segment eliminations.

Inter-segment revenues are generally computed on a cost plus fee basis.

A summary of the Company's operations by geographic areas for the three years ended December 31, 1983 is as follows:

	1983	1982	1981
Total revenues			
United States	\$5,512,761	\$ 2,521,551	\$ 2,645,828
Canada	4,484,261	3,874,708	4,585,167
Eliminations	(564,447)	(673,488)	(485,742)
Totals	\$9,432,575	\$ 5,722,771	\$ 6,745,253
Net income (loss)			
United States	\$ 787,207	\$(1,637,338)	\$(1,475,715)
Canada	137,397	(721,456)	(375,107)
Eliminations	(109,154)	(19,909)	(1,457)
Totals	\$ 815,450	\$(2,378,703)	\$(1,852,279)
Identifiable assets			
United States	\$4,505,700	\$ 3,696,208	\$ 4,892,256
Canada	3,702,739	4,325,921	4,377,693
Eliminations	(2,307,419)	(2,367,226)	(1,741,589)
Totals	\$5,901,020	\$ 5,654,903	\$ 7,528,360





Revenues in 1983 under the research program with British Petroleum amounted to \$1.1 million in addition to the \$2 million transfer of technology payment in January 1983. Revenues in 1983 under a minerals exploration joint venture with PNC, plc of London approximated \$1.7 million. In 1982, revenues paid to the Company by Petro-Canada Exploration Ltd. under the TIVAC development program amounted to \$897,000.

### 13. Subsequent Event

In January 1984, the Canadian government enacted legislation to stimulate research and development activities in Canada whereby companies incurring research and development expenditures may elect not to deduct

such expenditures for income tax purposes and may sell the related income tax benefits to third parties. Under this legislation, on February 13, 1984, the Company elected not to deduct \$2.16 million (Canadian) of research and development expenditures as deductions for Canadian income tax purposes and sold the related tax benefits to various third parties for \$1.0 million cash (Canadian). Of the total proceeds, approximately \$460,000 applied to 1983 expenditures and will be recognized in income by the Company in February 1984. The balance of the proceeds pertain to expenditures to be incurred in 1984 and will be recognized in income throughout 1984 as the actual research and development expenditures are incurred.

## 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, 1983 and 1982, and the related consolidated statements of operations, shareholders' equity and changes in financial position for the years ended December 31, 1983, 1982 and 1981. 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 consolidated financial position of

Barringer Resources Inc. as of December 31, 1983 and 1982, and the consolidated results of its operations and changes in its financial position for the years ended December 31, 1983, 1982 and 1981, in conformity with generally accepted accounting principles applied on a consistent basis, after giving retroactive effect to the changes, with which we concur, in the methods of accounting for foreign currency translation and interests in oil and gas properties as described in Note 1 to the consolidated financial statements.

COOPERS & LYBRAND

Denver, Colorado  
February 17, 1984

## 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.

	High	Low
<b>1983</b>		
First Quarter .....	\$7.50	\$4.25
Second Quarter .....	5.63	3.63
Third Quarter .....	5.75	3.25
Fourth Quarter .....	6.00	3.63
<b>1982</b>		
First Quarter .....	\$5.75	\$3.75
Second Quarter .....	4.25	1.25
Third Quarter .....	3.50	1.50
Fourth Quarter .....	7.38	2.87

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 approximate number of shareholders of record as of February 17, 1984 was 900.

The Company has not paid any cash dividends since inception.

### Annual Meeting

The Annual Meeting of Shareholders will be held in Golden, Colorado on May 9, 1984. The notice of meeting and proxy materials will be mailed to all registered shareholders in advance of the meeting.

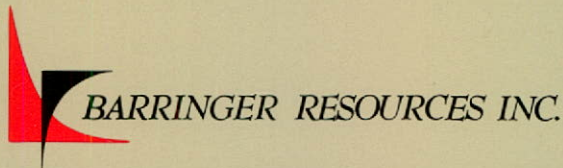
### Additional Information

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, *Chairman*  
Gary M. Cook, *President*  
Dr. D. Richard Clews,  
*Executive Vice President*  
John H. Davies,  
*Senior Vice President*  
Dr. W. Timothy Meyer,  
*Vice President*  
Andrew D. Murray, *Vice President*  
Robert J. Armstrong, *Secretary*  
Robert R. Gilmore, *Treasurer*  
Douglas C. McIntyre, *Controller*

### Corporate Counsel Satterlee & Stephens

277 Park Avenue  
New York, New York 10172

### Blackwell, Law, Spratt, Armstrong & Grass

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

### Stock Traded

Over-the-Counter  
NASDAQ SYMBOL: BARR

### 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

### 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 Magenta Limited**  
304 Carlingview Drive  
Metropolitan Toronto, Rexdale  
Ontario, Canada M9W 5G2  
Phone: 416/675-3870

**Barringer Resources Inc.**  
Reno Laboratory  
1455 Deming Way, Suite 15  
Sparks, Nevada 89431  
Phone: 702/358-1158

**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





*BARRINGER RESOURCES INC.*

Denver

Toronto

Calgary

Reno

