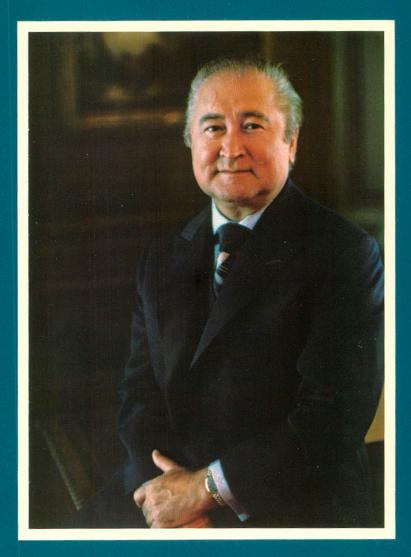


Front Cover: Testing of the first development well in the Prinos oil field in the Aegean sea offshore Greece. The flare on the right of the "jack-up" drilling rig indicates a most successful hydrocarbons test.

Back Cover: High speed crew boat "Akra Prinos" used to transport personnel to the offshore oil field.



This large flame dramatically illustrates the hydrocarbons producing potential of the Prinos tield. Here, only one of four productive zones is being tested at a rate of 4,500 barrels of oil per day.



This annual report reflects the diversification and growth projects underway as Denison leaves the seventies to emerge as a substantially changed corporation in the 1980's.

In the 1970's, a corporate policy of aggressively seeking growth was pursued by means of programs to acquire and develop assets. Some of the positive results now are visible in the dramatic photographs in this report of new facilities being built in Canada, Greece, Spain and the U.S.A.

Your Company is a vibrant, thriving organization with operations growing on an international basis. I believe our progress to date has given us a strong foundation from which we can continue to build optimistically for an increasingly profitable future.



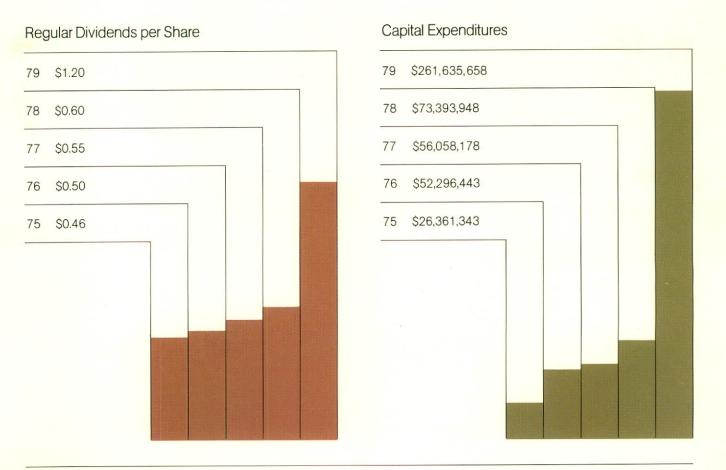






☐ Net earnings of \$56 million (\$3.07 per share), second highest in the Company's history.	Dividends of \$1.20 per share paid to shareholders in 1979, double the 60 cents per share regular dividends
Prinos oil and South Kavala gas projects, under construction in Greece, on target for production in early 1981.	paid in 1978.  Casablanca oil field, offshore Spain, producing oil into a tanker as planned for Phase I of the development.
Expansion of Elliot Lake uranium operations continues on schedule to meet planned targets.	Potash project underway in New Brunswick represents further diversification for Denison.
A four-for-one share split, approved by the shareholders, effective February, 1979.	Cement subsidiary achieves record sales and earnings and increases dividend rate.





The year 1979 was highlighted by the considerable progress made on expansion and development projects which are a key part of the future growth of your Company as a Canadian-owned natural resources organization operating internationally. In future years, as these projects are completed, the size and scope of Denison's business base will change dramatically.

The extent of the expansion projects

now underway is illustrated by the 1979 capital expenditures of \$261,635,658. These are almost five times our capital expenditures of two years ago. These important projects for growth are expected to extend into 1985 with the major portion completed over the next two years. Denison's present expansion phase is concentrated in minerals essential to the world's energy and food needs. Uranium, oil and gas, coal and potash are among the most vitally required

materials today and in the

foreseeable future.

#### Financial

Consolidated net earnings for 1979 of \$56,092,061 represent a decrease of 3.7% from the record level of \$58,241,136 established in 1978. The 1979 earnings are equal to \$3.07 per share. 1978 earnings were \$3.19 per share (after adjusting for the four-for-one subdivision of the shares effective February 23, 1979). The decline in earnings resulted from a number of factors, Uranium

a number of factors. Uranium production at Elliot Lake was lower than in 1978 due to necessary development in lower grade ore blocks and uranium production costs were higher. Other factors contributing to this decline were planned higher mineral and oil and gas exploration costs and reduced income from gains on disposal of securities.

Total sales of \$310,508,336 were up from \$269,888,785 in 1978 and are almost double the sales value of 1976.

#### Dividends

The level of earnings and future growth prospects enabled your Board of Directors to declare dividends of \$1.20 per share in 1979, double the 60 cents per share of regular dividends paid in 1978, each on a subdivided basis. With the dividend for the final quarter of the year at 35 cents per share, the indicated annual rate is \$1.40 per share. Since the first dividend was declared in October, 1959 total payments to shareholders have amounted to \$172.4 million.

#### Expansion

At a time of considerable economic difficulty in the world, it is gratifying to note that the expansion projects in which your Company is currently participating will benefit the people of the Elliot Lake area, the Canadian economy generally, the Provinces of Ontario and New Brunswick and both Greece and Spain.

The following is a brief summary of our current undertakings.

Uranium — The Elliot Lake expansion project is on schedule to reach planned targets to meet orders totalling 189,000,000 pounds uranium oxide for delivery over the next 31 years. An annual production rate of 6,000,000 pounds uranium oxide is the planned production goal. The expansion program at Elliot Lake, which is expected to continue through 1985, includes provision of extensive housing and other community facilities.

Oil and Gas — The developments of oil and gas fields off the coasts of Greece and Spain are most exciting undertakings bringing to fruition earlier discoveries. In Greece, where Denison has a 68.75% interest in the Prinos/South Kavala oil and gas project, initial oil production is expected early in 1981 with production to increase to 25,000 barrels per day within a few months. This is the first oil and gas development in Greece.

In Spain, where Denison has a 12.5% interest in the Casablanca field, the

first regular production of oil was shipped to a Spanish refinery in January, 1980. When the presently-planned development is completed, oil production is expected to be 45,000 barrels daily.

Potash — In 1979 Denison purchased a property in New Brunswick indicated to contain some 200 million tons of high quality potash for use as fertilizer. A shaft presently being sunk to provide access for development of this deposit will be completed late in 1980. This is the initial stage of a project which will involve a capital expenditure of at least \$150 million. The target date for production is the spring of 1983.

#### Coal

Through a decade of concentrated effort, your Company has acquired valuable interests in extensive coal reserves in northeast British Columbia and northwest Alberta.

Testing and feasibility work on these properties is well advanced.

Negotiations are currently underway to complete the marketing arrangements necessary to support production decisions.

#### Acquisitions

In addition to the growth projects described in this report, a major policy of your Company is to aggressively pursue attractive new investment opportunities. During the year Denison entered into an agreement to acquire by merger Reserve Oil and Gas Co. at a total cost of approximately U.S. \$525 million. Subsequently, Getty Oil Co. offered approximately U.S. \$635 million for all of the common and preferred shares of Reserve, and Denison entered into an agreement with Reserve and Getty under which the agreement between Reserve and Denison was terminated. To date your Company has received U.S. \$3 million under this agreement and, if certain conditions are met, a further U.S. \$7 million will be received on or prior to January 31, 1980.



C. D. Parmelee Vice-President, Corporate Affairs

C. H. Frame Executive Vice-President, Mining Operations

Stephen B. Roman Chairman and President

S. G. Roman Assistant to the President

E. B. McConkey Vice-President, Finance

#### Outlook

A review of the decade of the 70's shows the significant growth of your Company and its ability to identify and successfully pursue new opportunities for growth and profit.

During the decade assets have risen to over \$650 million, an increase of

\$540 million during the period. During the same period, earnings have risen from \$12.7 million (\$0.71 per share) to \$56.1 million (\$3.07 per share) in 1979.

Your Company continues to be dedicated to growing in the development of energy materials as well as seeking opportunities in other

natural resource related fields. Denison confidently enters the 80's with plans for a new cycle of profitable growth.

We wish to express our appreciation to all employees for their efforts and to our shareholders, friends and associates for their continued support.

On behalf of the Board of Directors.

Stephen B. Roman, Chairman and President, Chief Executive Officer.



# Major mine expansion program continues on schedule. Increased uranium production capacity will be available in mid-1980.

The first stage of the major expansion of facilities that will provide for increased uranium production represented a significant part of the year's activities.

A record number of tons were milled during 1979. However, due to lower grade of material processed, uranium production was slightly less than during the previous year. Underground operations were affected by necessary development in lower grade ore blocks. Highlights of Denison's developments at

 Long-term mining plans to achieve maximum recovery of your Company's Elliot Lake orebodies were developed by the engineering group. Paramount in these plans is the human resource requirement to ensure full and efficient use of the

the Elliot Lake operations included:

new and expanded facilities. Based on these plans, a major commitment to recruiting and training continues.

 New surface facilities, part of the expansion, were commissioned and occupied.

#### Expansion

The uranium expansion program will extend into 1985. It consists of two major targets the object of which is to produce and deliver to customers approximately 6,000,000 pounds of uranium oxide annually:

- more than doubling underground mining capacity to extract 21,000 tons of ore daily on a five-day week basis, compared with present rated capacity of 10,000 tons daily;
- more than doubling the 7,100 tons daily processing capacity of the central extraction plant to treat 15,000 tons of ore daily.

At the Mine, the expansion program comprises detailed engineering, surface construction and underground

development and construction.
Substantial progress was made in all areas. At year-end the program remained on schedule.

Progress on surface was highlighted by the completion of the 15 Panel main airway raise, the completion of the No.1 Shaft Dry, with capacity for 600 men, the completion of the 115 KV/44 KV substation on surface and the completion of the Central Maintenance/Warehouse complex. Good progress has been made on the construction of the new grinding building where the semi-autogenous grinding mill will be installed.

At the Hydrometallurgical Plant, the new yellowcake and reagent storage area has been completed. Construction work is progressing satisfactorily in the new neutral thickener area; in the leaching area where structural steel erection is complete and ready for the installation of the twenty new pachuca tanks; in the acid filtration area; in the ion exchange area and in the wash thickener area.

Left: High riggers erect the steel frame that will house the expanded leaching circuit at the Elliot Lake mill.



Reinforcement steel for pillars being moved into place at the leaching area.





warehouse shown under construction will stock over 18,000 inventory items.

Underground, the "A" Axis conveyorway southwest of No. 1 Shaft and two main airways west and southwest from the main northwest intake airway raise have been completed. The decline has been driven to the bottom of No. 2 Shaft and construction is progressing on schedule for the new crusher and loading pocket facility at this shaft. Excavation is in progress for two new conveyorways. The new southwest airway which is being driven has reached the Quirke Lake overthrust where grouting is in progress.

At the Stanrock Mine, dewatering began in February, and has included the rehabilitation and start-up of hoists at both shafts and setting up water treatment facilities in the existing mill building. Dewatering is in progress through the No. 1 Shaft at a rate up to 1,200 gallons per minute.

#### Milling

A total of 2,440,000 tons of ore, assaying 2.03 lbs. per ton, was milled during the year. This was a daily average of 7,135 tons and 4,495,767 lbs.  $\rm U_3O_8$  were produced. The average recovery was 93.16%.

The varied grade content of the ore and, in some cases waste material from dyke and basement caused metallurgical problems and resulted in reduced overall recovery. The metallurgical staff continues studies designed to improve recoveries.

Advantage was taken of the annual shutdown to perform maintenance in key areas. Major rebuilding work was carried out on those sections common to the existing and expanded plant, including the coarse ore bins at No. 2 Shaft, the uranium dryer and process water lines.

Commencing in August, the quantity of mine water being treated in the mill increased from 3,600 tons per day to 4,800 per day. Also, since August the sludge from the treated mine water from Stanrock has been trucked to the mill for uranium recovery augmenting overall production from mine water.

#### Mining

Mining operations were highlighted by the successful completion of an ambitious development program. New openings were provided at No. 2 Shaft for the ore crushing, handling and hoisting facilities needed to process larger quantities of ore mined from the reserves south and west of the main shaft.

An accelerated development program in upper reefs, introduced in late 1978, led to a successful and timely completion of key ventilation airways and access routes.

Major new mining blocks required for increased production in 1980 and future years are now accessible in both the main and upper reefs.

The central exhaust corridor, linking areas south of the Keyes Dyke to 15 Panel Exhaust Raise, was completed allowing use of present surface ventilation fans at their practical limits. The first stage of increasing the production hoisting capacity at No. 2 Shaft was successfully completed by increasing the hoist speed from 1,300 feet per minute to 2,200 feet per minute.

Service facilities in the shaft were improved through the replacement of compressed air and water lines with larger diameter pipe. A new stainless steel mine water pumping system was installed, doubling discharge capacity and allowing the pumping of mine acid water to surface for treatment.

Extensive testing of high speed electrichydraulic jumbos was completed in August. The increased use of this hydraulic equipment is in keeping with the Company's policy to improve productivity and the working environment.

The development and testing of low profile trackless mining equipment, which will be required in years ahead, continued to receive high priority.

#### Environmental Protection

The mine ventilation system was further improved with the commissioning of a major upcast facility near No. 1 Shaft at the 15 Panel Raise. This system, brought on stream during April, 1979, increased total air capacity to 4,500,000 cubic feet per minute from 2,700,000 cubic feet per minute a year ago. The 15 Panel Raise has been equipped with twin centrifugal suction fans with a combined capacity of 2,250,000 cubic feet per minute.

The new raise southwest of No. 2 Shaft will increase primary intake capacity to 6 million cubic feet per minute. Together with existing exhaust openings, this will provide the flexibility to meet foreseeable future needs.

Studies were carried out in existing

Studies were carried out in existing surface processing plants with a view to

continued improvement in environmental conditions. Contracts have now been let and equipment is on order which when installed will substantially reduce present dust levels in the crushing plant.

Studies continued on abandonment requirements for tailings disposal in both the Long Lake basin and at Stanrock. Surface experiments are being carried out on the characteristics of the coarse fraction of the tailings. These tailings will be used later as an underground backfill material. Experiments are underway on thickened tailings to assess the potential of the material for the final close-out of the tailing areas.

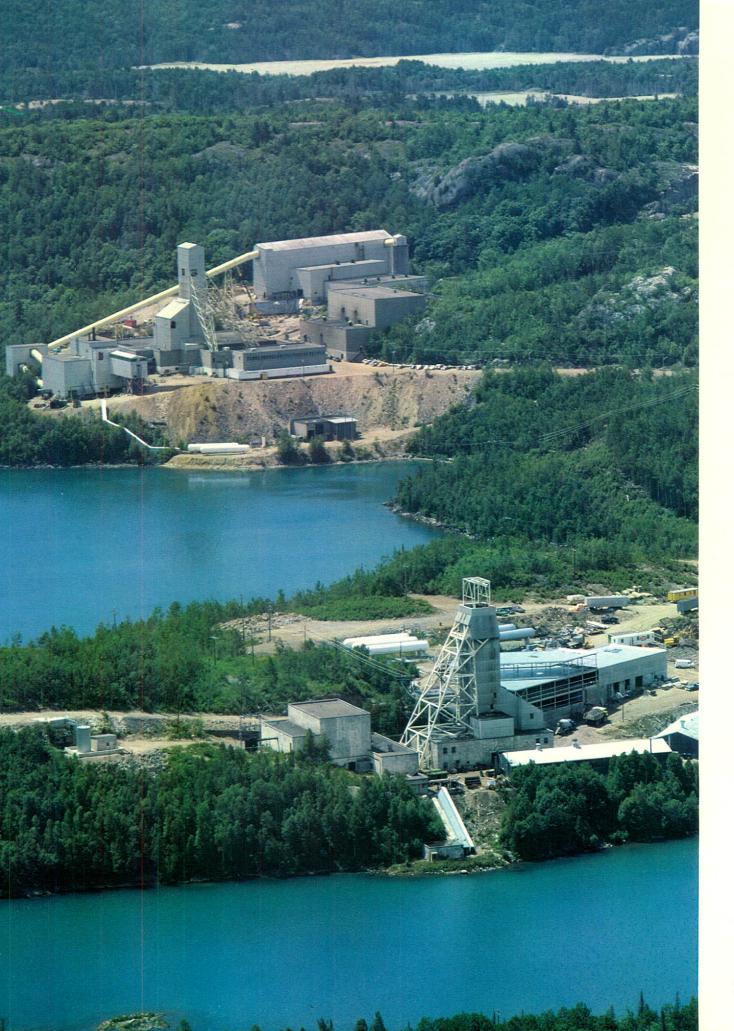
## Industrial and Community Relations

Negotiations for the renewal of a collective agreement, covering all union-represented employees, were successfully carried out without work interruption.

Coast-to-coast recruiting, involving over 10,000 interviews, resulted in an increase from 1,658 to 1,888 in our Elliot Lake workforce, despite the high turnover common to the mining industry. Your Company's already excellent training program was stepped up to further raise the skill level of mine and maintenance personnel. A program of constructing new housing for rental has been underway since 1975.

Despite the stresses of expansion, the accident frequency within the workplace continued to decline and was down approximately 24% from 1978.

Right: In the foreground Denison No. 1 shaft. In the background is the No. 2 shaft with related facilities.





Oil production in Spain, successful drilling on major offshore development in Greece and natural gas success in Louisiana highlight broadening international activities.

Revenue from oil and gas sales was slightly higher in 1979, compared with 1978. All revenues were from Canadian production.

Foreign developments, notably in Greece and Spain, are expected to start contributing to revenue in 1980, with revenues building rapidly to significant amounts in 1981.

In 1979, Canadian prices for oil and gas increased as provided under pricing agreements between governmental authorities. Further increases are expected during 1980. It is not yet known what portion of any increases will accrue to producing companies.

Denison's Canadian oil production averaged 4,400 barrels per day compared to 4,500 barrels per day in 1978. Production of natural gas was at the rate of 10,000 MCF per day in 1979 compared to 9,295 MCF per day in 1978.

#### Canada

Although major efforts of the Oil and Gas Division concentrated on bringing into production discoveries in Greece and Spain, Canadian activities included drilling of nine wells of which three were oil successes and four were natural gas successes.

Alberta: In the Armisie area two new oil wells were drilled on Denison's 100% owned acreage. Combined initial production volume exceeded 100 barrels of oil per day. In the Niton area, a successful gas well was drilled in which Denison retains a 50% interest. A successful oil well was drilled at Edson in which Denison has a 40% interest and a second well was commenced in November, 1979. At Cessford, Denison participated in two successful gas wells. Denison also acquired a 20% interest in a 17,000 acre Crown parcel in the Deep Valley area of Alberta. In the Judy Creek area, Denison is participating in a

Left: In the Gulf of Mexico drilling is shown underway on a block where Denison and its partners are developing a gas prospect. proposed innovative tertiary recovery project using carbon dioxide for injection.

Seismic programs were conducted in the Bigoray, Pembina, and Brazeau areas where the objective is the Devonian formation. One deep test drilled on the Pembina acreage under farmout at no cost to Denison was unproductive and abandoned. Drilling was also carried out in the Brazeau area on acreage which was pooled with owners of adjacent holdings. Casing has been set for evaluation.

British Columbia: A successful gas well was drilled under a farmout agreement to a major company in the Sierra area and further drilling is now being carried out.

#### **United States**

Activity increased substantially in the United States. Denison was active in exploration and development drilling both onshore in Texas and Mississippi and offshore Louisiana.

Louisiana: Successful drilling resulting in the development of commercial gas reserves was carried out on Ship Shoal Block 320 (25% owned by Denison), one of three Gulf of Mexico blocks in which Denison participates. Five wells were completed with gas production expected to start in early 1980. This gas will be transported from the producing platform by a flowline to a 16 in. pipeline owned by Tenneco, which will purchase all production from this platform at the highest prices prescribed by the U.S. Federal Power Agency. Initial price is expected to be U.S. \$2.34 per MCF for gas having heating value of 1,000 BTU's per cubic foot. Prices subsequently escalate according to the prescribed formulas of the Agency. Production equipment installed on the platform is designed to deliver up to 30 million cubic feet of gas per day.

On West Cameron Block 624 (19.2% owned by Denison) the platform which had been constructed for drilling and production operations sustained irreparable damage during installation and as a result had to be scrapped. The platform was fully insured. An identical replacement platform is being built. Eight development wells will be drilled on this block after the platform is installed early in 1980.

A well was drilled on Block 625 (17.5% owned by Denison) using a floating rig.

Several showings of gas were encountered although they were not commercial. However further exploration drilling is planned. As Blocks 624 and 625 are adjacent, it is expected that one or two wells will be drilled directionally from the Block 624 platform to explore portions of Block 625.

Mississippi: Denison together with a partner purchased 4,800 net acres in Jefferson Davis County where a well was drilled to a depth of nearly 17,000 ft. This is the deepest well in which Denison has participated.

Although this well drilled through sands having hydrocarbon shows and casing was set for further evaluation, the completion and testing operations carried out at various intervals did not establish commercial production and the well was suspended.

Texas: In Tom Green County, Texas, three unsuccessful wildcat wells were drilled. In addition, one well in Webb County was abandoned after recompletion attempts in a secondary zone were unsuccessful.

California: Denison has a 10% participation in a group which was successful in acquiring a block of approximately 5,000 acres offshore California in the Santa Barbara area.

#### Greece

Development of production from the Prinos/South Kavala Field is being managed by North Aegean Petroleum Company, an operating company domiciled in Greece which was created by Denison and its partners. Denison has a 68.75% ownership in this project.

Mechanical completion of the plant is expected in December, 1980 with production expected to increase to full design rates of 25,000 barrels per day early in 1981.

The Prinos/South Kavala development is international in character with financing, engineering skills and equipment being obtained worldwide.

Financing arrangements were completed with an international group of lending institutions led by The Canadian Imperial Bank of Commerce, providing a project and overrun loan facility of up to US\$245,000,000.

A significant portion of the construction work is being done by Greek companies, both alone and in collaboration with foreign experts having the necessary experience and technology.

A substantial number of Greek nationals now are employed by North Aegean Petroleum Company and its contractors. A training program for plant operators is underway to assure that Greek nationals will have maximum opportunity for employment in the Prinos/South Kavala project.

Development drilling operations commenced in August. Two four-pile drilling platforms designated Alpha and Beta, one built in Greece and one built in Italy, were installed in August and drilling commenced shortly thereafter employing Penrod Rig No. 58, a jack-up type of drilling rig. The first well, designated PB13, was a very successful well. Over 600 feet of pay in total was encountered in four zones each of which was tested at rates exceeding 4,500 barrels per day.

A second well, PB 14, commenced on October 18, 1979. This well was extensively sampled by diamond coring and the results indicated an even thicker section of high quality oil sand to be present.

A second drilling rig, JFP-1, newly constructed in Japan, was taken under contract and arrived in November where it was installed over the Alpha platform and drilling commenced in December.

Two additional platforms designed by Fluor Ocean Services are being built in Greece. A consortium of German, Italian and Greek contractors is building an eight-pile platform, designated Delta, to support production facilities in the Prinos field. Pipelines will also be built by these contractors. This platform to be located nearby platforms Alpha and Beta will contain facilities to separate oil production, gas and water. Injection pumps to inject water into the reservoir to maintain pressure are also included. The Delta platform will be connected to the mainland by oil and gas pipelines where plant facilities to recover sulphur are under construction. The plant site, designated Sigma, is near the village of Nea Karvali east of the City of Kavala. Because of unstable ground conditions and the possibility of earthquake activity, extensive soil improvement has been undertaken with the installation of rock chimneys and soil replacement in areas where sensitive processing facilities are located.

Natural gas has also been developed in an area seven miles south of Prinos known as the South Kavala Gas Field. A production platform will be installed at South Kavala where two wells previously drilled will be re-entered and connected to processing facilities located on the platform. If required in the future, additional wells could be drilled from the platform. Gas from South Kavala will be pipelined to the Delta platform, combined with gas recovered in connection with the Prinos oil production and then moved to shore in the gas pipeline.

#### Spain

The first development well to be drilled in the Casablanca Field has been successfully completed and has been tested at rates of over 11,000 barrels daily. This well, Casablanca No. 6, is one of the two wells which comprise Phase I of the Casablanca Field development. The second well, Casablanca 1A, previously produced 1.5 million barrels through temporary facilities. The Casablanca 6 and Casablanca 1A seafloor locations are adjacent. These wells are to be produced directly into a tanker.

The Afortunada, a semi-submersible drilling platform, was constructed in Spain and will be employed as a floating production platform where oil will be separated from gas and water and transferred to the oil tanker for storage and transportation to shore. A 30 mile pipeline to a refinery in Tarragona is being built and when it is completed the tanker will be released. One of the two wells is equipped with a subsea wellhead designed to be installed and operated in deep water without the assistance of divers. The second well will temporarily be produced as in the original production test through a riser and blowout preventer. Once the subsea tree has proven its reliability, the second well will be similarly equipped. A permanent production platform to be built in Spain is to be installed in 550 ft. of water and will be used to drill three directional wells to different parts of the

built in Spain is to be installed in 550 ft. of water and will be used to drill three directional wells to different parts of the Casablanca structure. The Afortunada will be released and the two early production wells, Casablanca 1A and Casablanca 6, will be connected to the fixed platform. As a result of development in this manner, 45,000 barrels of oil per day will be produced.

The Casablanca Field underlies a portion of two leases of diverse

ownership which have been unitized. Denison's initial equity in this unit will be 12.447%. There is provision for renegotiating equity interests at a later date.

Denison's share in the unitized area is derived from its 15% share in Casablanca and a 3.5% share in the Montanazo Block. The government of Spain elected to acquire a 30% interest in the Montanazo Block and therefore Denison's interest was reduced from 5% to 3.5%.

No exploration wells were drilled on the Spanish permits in 1979. Some seismic work was done to assist in development drilling. It is anticipated that some drilling may occur in the exploration areas in 1980 and 1981.

#### United Republic of Cameroon

An extensive seismic program was carried out on Denison's offshore holdings in Block HP 33, United Republic of Cameroon. The drilling of several wells is anticipated during 1980. Denison has acquired an interest from a partner and has also entered into a farmout arrangement with a major company whereby 50% of its 22% interest in the H-33 Permite (Douala Block) will be farmed out for cash, an interest in an adjacent permit. repayment of Denison's 1979 exploration costs and payment of Denison's 1980 exploration and drilling costs. This favorable transaction is subject to approval by the government of Cameroon.

#### Guyana

Denison acquired a 50% interest in a 4,200 square mile permit offshore Guyana. Following a thorough review of all available exploration data previously acquired on the permits, Denison has relinquished certain lands and is acquiring additional lands so that as a result the boundaries of the permits are to include a reduced area of 2,340 square miles. Under this permit Denison expects to participate in a seismic program in 1980 to be followed, depending on results, by the drilling of wells.

#### Nicaragua

The recent political changes in Nicaragua have resulted in suspension of all activity on the Pacific Continental Shelf offshore permits. Contact has been made with the new authorities in Nicaragua in an effort to ascertain the status of our licences.





Inspecting threads on well casing aboard the drilling rig.

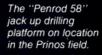


Senior technicians in the well logging unit of the "Penrod 58."



Engineers study scale model of the mainland Prinos sulphur plant.

Construction is underway east of the City of Kavala in northern Greece on the mainland site 12 miles from the offshore Prinos oilfield.



### Greece



Engineers George Cosmos and Al Carl inspecting the scale model of a Prinos offshore platform.



The massive semisubmersible drilling platform "Afortunada" will be the primary production platform in the first stage development of the Casablanca field offshore Spain.

## Spain



A subsea well head is readied for sea-floor installation on a development well.



Welder completing equipment installations on the "Afortunada."



The "Medusa" drilling rig completing the first development well in the Casablanca field.



Testing controls on the offshore drilling platform.

Final equipment adjustments being made aboard the "Afortunada" before production testing begins.



Helicopter support plays a vital role in offshore operations. Here, one approaches the drilling platform located on Ship Shoal Block 320.

## **Gulf of Mexico**





Lights illuminate working area for 24 hour operations on a drilling platform in the Gulf of Mexico.

### Alberta

Operator inspects a typical oil producing pump jack on a Denison well in northern Alberta.



Major resources in northeast British Columbia and northwest Alberta in preparation for development as international markets materialize

The Coal Division concentrated during 1979 on marketing activities related to the Quintette project and the Coalspur property and exploration on the Belcourt and Whitecourt properties. The highlights of the results of the year's efforts are as follows:

- Basic agreement was reached with Romania regarding the purchase of up to thirty million tons of Quintette metallurgical coal over a 20-year period expected to begin in 1983.
- Mitsui Mining has stated that it will purchase 300,000 tons per year of metallurgical coal from Quintette.
- Charbonnages de France has agreed by letter of intent to purchase 200,000 tons per year of metallurgical coal from Quintette.
- Potential open pit mines capable of supporting production levels in excess of four million tons per year were identified on the Belcourt property.
- In place reserves of thermal coal amounting to 380 million tons were identified on the Whitecourt property in Alberta.
- Active plans are underway to prepare the Coalspur project for production by the mid 80's.

The long-term outlook for metallurgical coal is improving, primarily because of expansion plans cautiously being put into effect by the world steel industry. World steel production rose slightly during 1979 with the result that the traditional producers have been encouraged and the developing nations with steel plants under construction are continuing their installation programs. Countries such as Korea, Taiwan, Brazil and others are undergoing industrialization on a scale achieved by the larger industrial countries in the 50's and 60's.

Left: Lab technician Brenda Jenkins testing coal samples under the supervision of Denison geologist Bill Prescott. An important consideration for steelmakers is an assured source of supply of metallurgical coal of suitable quality at internationally competitive prices. Steel producers prefer to diversify their sources of essential raw materials and Canada is being recognized increasingly as a reliable long-term source of metallurgical coal. Thermal coal also presents new opportunities. As a result of continuing increases in crude oil prices and the danger of oil supply shortages, interest has revived in thermal coal as a source of fuel for electricity generating plants, for the cement manufacturing industry and for other energy-intensive industries. Improvements are being made in generating station design, burning techniques and coal preparation methods to ensure compliance with environmental objectives. Increasing thermal coal demand is of immediate interest to Denison because of our Coalspur property in Alberta and our Quintette metallurgical property which will produce some thermal coal as a byproduct from metallurgical coal operations. The Coalspur property has the special advantage of an established infrastructure in an historical coal producing area.

The potential tonnage requirements of the thermal electric generating industry are large. A typical 1000 megawatt station would require in the order of 2.2 million tons of coal annually. Thermal coal requirements of the Japanese electricity generating industry alone are forecast to be 50 million tons per year by 1990, and substantial increases in thermal coal demand are forecast for Korea and Taiwan. Marketing discussions regarding Denison thermal coal have been initiated with utilities in Japan, Korea, Taiwan, Europe and Puerto Rico.

The development of coal resources in northeast British Columbia is of vital importance to the Province of British Columbia. Both the British Columbia Government and the Federal Government have clearly indicated their intentions to open up this area and they continue to carry forward joint programs which will inevitably benefit the economic viability of Denisonmanaged metallurgical coal properties, as well as other properties in the area.

In September the Premier of British Columbia headed a mission to Japan with its major goal being the enhancement of metallurgical coal trade between Japan and the potential coal producers in the Province.

During 1979 the decision was taken to establish a major grain and coal port near Prince Rupert, British Columbia. Ridley Island has been selected as the site of the new terminal on which construction will begin immediately for grain storage and handling. Provision for coal handling facilities has been included in the ultimate plans for the development of Ridley Island, Prince Rupert provides an excellent yearround harbour with access to world markets for Western Canada. The British Columbia Government has taken additional steps to construct the infrastructure necessary to support the development of the northeast coal area. Tenders have been called for construction of an access road to Ridley Island and for completion of the design of the highway south from Chetwynd to the proposed new townsite at Tumbler Ridge. This project includes a key bridge across the Murray River. Tenders have also been called for construction of approaches to the rail and highway bridges across the Pine River on the route south from Chetwynd toward the Quintette, Belcourt and Saxon properties.

#### British Columbia

#### Quintette

The major effort on the Quintette project during 1979 has been in the area of marketing.

Discussions based on the Protocol signed with Romania in late 1978 resulted in the signing of a basic agreement in the latter part of 1979 for the purchase by Romania of up to thirty million tons of Quintette metallurgical coal over a 20-year period expected to commence in 1983. Discussions continue with representatives of Romania regarding the detailed sales agreement and it is anticipated that final arrangements between Quintette and Romania will be formalized by April, 1980.

Mitsui Mining, a partner in the Quintette project and a producer of coal and a processor of metallurgical coke in Japan, has stated that it will purchase 300,000 tons per year of Quintette coal beginning with the start of the project. Charbonnages de France, a major producer of coal and coke in France, has agreed by letter of intent to take 200,000 tons of coal from Quintette per year. These developments, along with active

discussions underway with other consumers, especially the Japanese Steel Industry, have encouraged Quintette to prepare to make plans for beginning the development of the property in 1980.

Negotiations are underway with the British Columbia Government and other agencies to finalize terms for the transport and handling of coal and for the provision of the infrastructure required to develop the northeast area which initially will be centered around the Quintette Project.

The Quintette property covers 108,176 acres and is located approximately 70 air miles southwest of Dawson Creek, British Columbia. The property is estimated to contain 2.8 billion tons of high quality metallurgical coal, to a maximum depth of 1,500 feet.

Preparation of Stage II documentation, as required by the Provincial Government "Guidelines for Coal Development", proceeded during the year, and this material is planned to be

submitted to the Government in January, 1980. Approval of this material by the British Columbia Government will represent approval in principle of the project.

#### Belcourt

The Belcourt property consists of 119,740 acres, located approximately 90 air miles south of Dawson Creek. Under a 1978 agreement Gulf Canada Resources Inc. acquired a 40% interest, and a four-year program of exploration and feasibility studies was undertaken with a planned expenditure of \$10,000,000 to \$15,000,000.

During 1979, the second year of major field exploration was completed and culminated in the compilation of a Preliminary Geological Report in November. This report confirms the presence on the property of an estimated 1.1 billion tons of good quality metallurgical coal in place. The report delineates potential open pit mining areas capable of producing in excess of 4,000,000 tons a year. Preliminary test

results indicate a medium volatile coal with good coking characteristics. A preliminary study to examine engineering and economic feasibility of the project is in progress, and is planned to be completed by March 31, 1980.

#### Saxon

The Saxon property consists of 33,585 acres located approximately 100 air miles south of Dawson Creek, British Columbia. Studies completed to date indicate that the property contains in excess of 500 million tons of coal in place to a maximum depth of 1,500 feet. Preliminary mine plans have been completed and studies have demonstrated the technical and economic feasibility of an annual production of 4,000,000 tons. Mineable reserves have been proven sufficient to support this output for more than 20 years.

The Ruhrkohle Group, consisting of Ruhrkohle, A.G., Mitsui & Co., and Usinor (Union Siderurgique Du Nord Et



Helicopters provide the best access to the Belcourt Coal Property winter installations.

Right: Better appreciation of a coal seam on Quintette is achieved utilizing the model under study by the team of Larry Pituley. Richard Hermann, Ray Hower and Gordon Gormley.

De L'Est De La France, S.A.) has acquired a 30% interest in Saxon Coal Limited. The remaining 70% interest is held by Denison Mines Limited, manager of the project.

#### Fort St. John

In April, 1979, three new properties totalling 102,646 acres were acquired in northeast British Columbia. After preliminary examination, two properties were retained. Some drilling is planned for the Hudson and Pine properties early in 1980.

#### Alberta

#### Coalspur

The Coalspur leases consist of 94,719 acres located south and east of the town of Hinton, Alberta. These leases, which are 100% owned by your Company, are estimated to contain in excess of 2.5 billion tons of good quality thermal coal. There is also potential for the presence of metallurgical coal in the most westerly block of these holdings. Aerial photography and topographic

mapping at the property have been completed.

#### Whitecourt

An exploration program was carried out on the Whitecourt coal leases during the summer of 1979. This program demonstrated the presence of 380 million tons of coal in place of which 150 million tons could be surface mined with strip ratios of less than 10:1. The coal is classified as sub-bituminous "B", with a thermal content of 9,735 BTU/pound.

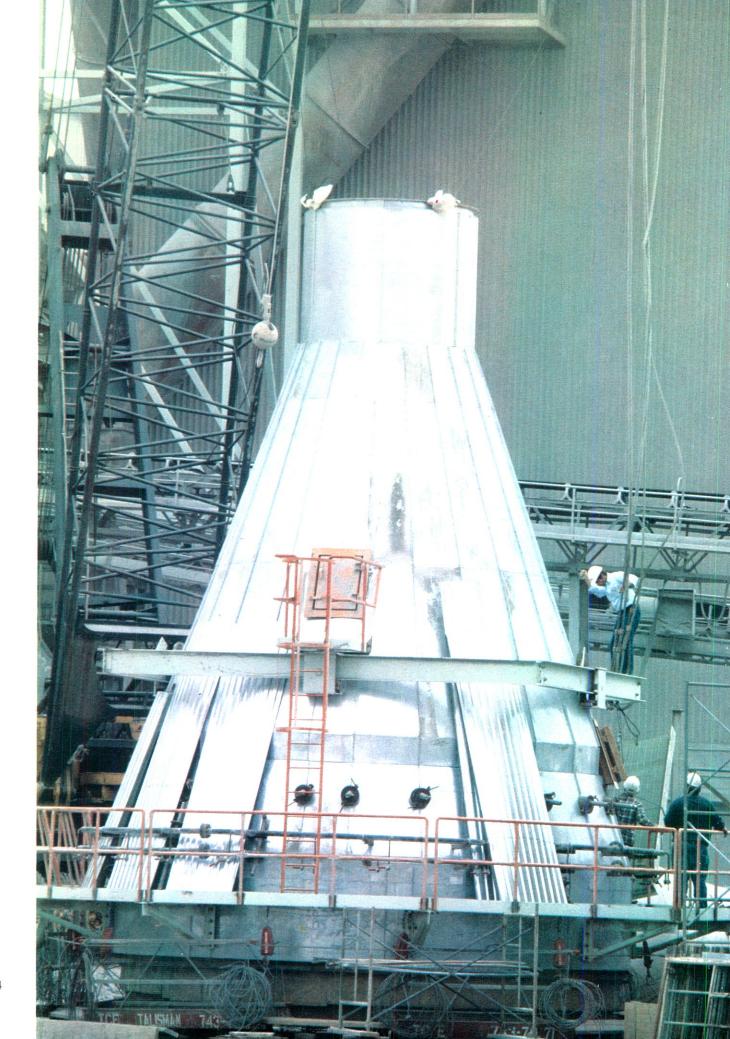
As a result of the summer exploration program two of the Whitecourt leases, containing 1,760 acres, have been returned to the Government. The property now consists of 9,120 acres, located approximately 10 miles north of the town of Whitecourt, Alberta. The property is 100% owned by your Company.

#### Wildhay

The Wildhay property consists of 26,543 acres of coal leases in two

blocks approximately 25 miles northwest of the Town of Hinton, Alberta. The leases are 100% owned by your Company. Possible mine sites are within 15 miles of the existing Alberta Resources Railroad. Exploration potential is in the order of 100 million tons of coal in place, to a depth of 1,500 feet. The coal is expected to be medium volatile metallurgical quality.





#### LAKE ONTARIO CEMENT LIMITED

Record sales and earnings reflect improved prices and margins in cement and the discount on the Canadian dollar. Dividend rate increased.

Record levels in both sales and earnings were achieved in 1979 by Lake Ontario Cement Limited which serves cement and concrete product markets in the Great Lakes region. Denison has a 54% ownership interest in this company.

Dividends paid in 1979 totalled 35 cents per share with the indicated annual rate increased to 40 cents on the basis of a second semi-annual payment of 20 cents.

The record performance was accomplished as a result of better selling prices and improved margins in the cement operations and the benefits of the favourable exchange rate of the Canadian dollar on exports to the United States.

Financial — Consolidated sales for the 12 months ended December 31, 1979 totalled \$88,317,149, up 13% from the corresponding figure for 1978 of \$78,363,743.

Consolidated net earnings for this period were \$4,943,462 (\$1.15 per share), an increase of 57% over the \$3,149,910 (\$0.73 per share) reported for the same period in 1978. These 1979 earnings are before extraordinary items of \$950,000 which increased the net earnings for the year to \$5,893,462 (\$1.37 per share).

The extraordinary items relate to compensation received during the year in settlement of claims arising out of the failure of certain equipment supplied to the Picton cement plant and for the expropriation some years ago of a lease of property held by Lake Ontario Cement.

Marketing Operations — Lake Ontario Cement markets cement in Ontario and through its U.S. subsidiaries in western New York State and central Michigan. Concrete products are sold in Ontario through the Premier Concrete Division and Primeau Argo Block Co. Limited. The volume of cement shipments in 1979 was approximately at the 1978 level. Profit margins improved because of better selling prices and efficiencies achieved in manufacturing and distribution activities.

Shipments of ready-mixed concrete, concrete block and aggregates were

less in volume in 1979 compared to the previous year while concrete brick shipments improved. Margins in the ready-mixed concrete business continued to be adversely affected by low selling prices in the Metropolitan Toronto and Hamilton markets.

#### REISS LIME COMPANY OF CANADA LIMITED

Production capacity more than doubled with demand strong.

Demand for lime in northern Ontario in 1979 exceeded the capacity of the Reiss Lime plant at Serpent Harbour, Ontario. The long-term outlook is for a continuing increase for industrial and environmental uses. In anticipation of the strong market, Reiss Lime in 1978 made a decision to expand its production facilities to more than double its lime output. A new kiln and supporting facilities at Serpent Harbour were completed on schedule and within budget in late 1979.

The new kiln, now operating, and improvements to the original kiln are expected to result in a record year for production and plant efficiency in 1980.

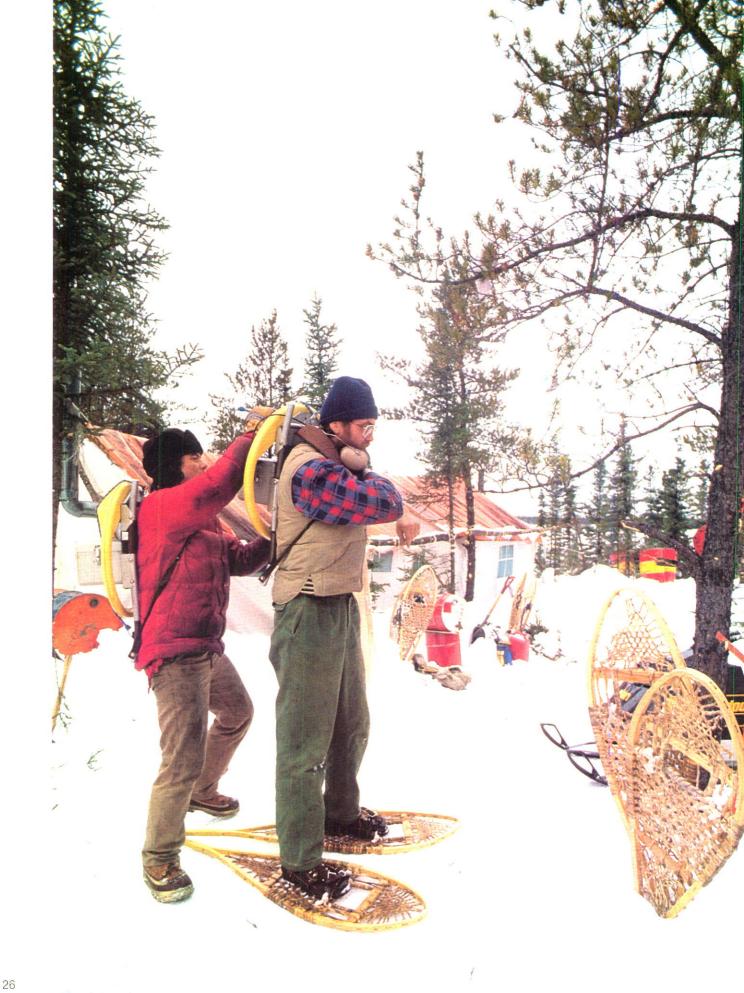


Left: At the Picton
Plant of Lake Ontario
Cement a large cap for
a conditioning unit is
readied for hoisting to
its final position on the
preheater tower.



The hoisting sequence and final placement of the cap on the preheater tower show the significant size of this structure.





## Mining exploration accelerating and broadening in Canada and many other parts of the world.

Mineral exploration activities have been expanding and intensifying over the past few years and Denison is now active in Canada, the United States, Africa, Australia, Mexico and Central America.

In 1979 additional exploration staff were established in British Columbia, Ontario and Saskatchewan. This was done to give Denison closer and more direct contact with the exploration and mining communities in these areas so that new opportunities could be identified more quickly. Effort was concentrated on uranium, ferro-alloy elements, precious metals and base metals.

#### Canada

The largest program continued to be in Saskatchewan where we have various large joint ventures, including those with Mega Montan of West Germany, Mitsui & Co. Ltd., Saskatchewan Mining Development Corporation and Western Mines Ltd. Preliminary mapping and

geophysical surveys have been completed on most of the projects. A number of "scout" drill holes produced some encouragement and activity during the coming months will be concentrated mostly on drilling of newly discovered targets considered attractive. In Ontario and Quebec attention is focused on gold and base metal prospects while in British Columbia ferro-alloy and base metals have received particular attention.

#### United States

Exploration teams in Washington State continue to find minor uranium values on the Quad Metals joint venture property. Drilling will continue in an effort to determine its importance.

Denison and Getty Minerals, the mining arm of Getty Oil Company, have formed a joint venture for base metal exploration in the mid-west.

The reconnaissance program with Geomet Exploration Inc. is being completed as is the drilling program on the Le Bar-Hall property, Wyoming, where minor extensions to the uranium deposits were found.

#### Africa

Drilling continues on alluvial gold deposits on Denison's concession in the United Republic of Cameroon. Drills have successfully outlined some gold deposits and feasibility studies will be undertaken early in 1980.

Other opportunities for diamonds and gold in Eastern Africa are being studied.

#### Australia

Properties in the Alligator River uranium area of the Northern Territories are being studied. Other property examinations have been carried out and preliminary exploration will be continued.

#### Mexico and South America

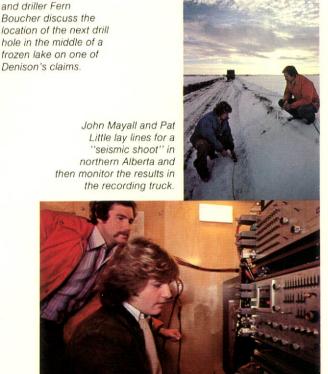
Changes in the mining and economic climate in Mexico and in South America have stimulated interest. Denison is examining properties in favorable areas.



Left: Major year round efforts are being made in prospective uranium districts surrounding the Athabasca Basin in northern Saskatchewan. Marc Gauthier and Bob Buchanan prepare for a field trip with portable magnetometer equipment.

A canoe provides easy access for geologists to remote exploration areas.





Standard Trust Company experienced another record performance in 1979. Net income increased 71% to \$1,316,000 from \$772,000 in 1978. Total assets amounted to \$253 million at December 31, 1979, an increase of 37% during the year.

This marks the ninth straight year in which the company's earnings and total assets have increased. Rapid expansion of the mortgage portfolio was the principal contributor to the growth in assets.

To support continued growth of the company's business, Standard Trust sold 200,000 \$20 Series A cumulative redeemable preferred shares to a Canadian chartered bank. The \$4,000,000 raised through this issue increased the company's borrowing capacity by \$88,000,000.

In 1979, new branches were opened in five Ontario communities. The year also saw the first concrete results of the company's program to extend operations beyond the boundaries of Ontario. Licenses were obtained to operate in Alberta, Saskatchewan and Quebec. Standard Trust opened its first branch office outside the province of Ontario — in Edmonton, Alberta. A

second Alberta branch is planned for Calgary. The company now has a total of 16 branches.

As a consequence of the increasing profitability, the directors of Standard Trust authorized the payment of dividends to shareholders in 1979 amounting to 60 cents per common share, double the 30 cents paid in 1978.

Pacific Tin Consolidated Corporation is a diversified producer of minerals and metal products. This company continued to experience healthy increases in both sales and earnings in 1979. Dividends received by Denison increased with 90 cents per share being received in 1979, up from 80 cents a share received in 1978.

Consolidated net income for the first nine months of 1979 was \$2,194,000, up 32% from \$1,660,000 earned in the same period in 1978. Pacific Tin accounts are in U.S. currency.

Malaysian tin operations had higher average prices received which more than offset the effect of marginally reduced sales tonnage. Prices of tin improved sharply to average \$6.58 per pound for the first nine months, up 23% from the corresponding 1978 average of \$5.37 per pound.

32.5%

14.1%

16.5%

46.9%

19.3%

38.25% \*

70.0%

The Feldspar Corporation, a whollyowned subsidiary of Pacific Tin, is a leading United States producer of feldspar and related products. It benefitted from the addition of the EPK Clay Division, a kaolin and silica sand business acquired in December, 1978. The glass and industrial sand production capacity of the EPK Clay Division is currently being expanded by 50%

50%.

Pyron Corporation, another whollyowned subsidiary, which produces iron
powders, also reported significantly
improved sales.

Parlake Resources Limited is active in oil and gas exploration and participates with Denison Mines in a project in Mississippi. Parlake is the result of a 1979 merger of previously inactive Vespar Mines Limited and Lakehead Mines Limited. Denison Mines has a 19.3% interest in Parlake Resources.

Canray Resources Limited is participating in an ongoing oil and gas exploration program in Burleson County, Texas. At present, 12 successful wells have been drilled, ten of which are now on stream, each producing 180 barrels per day. This program, in which Canray has a 10.625% working interest, includes drilling of an additional 15 wells that will add substantially to cash flow in the future.

Also, the three gas wells drilled in West Bethaney, Texas (11.25% working interest before payout and 10.0% after payout), and two gas wells in Vermillion Parish, Louisiana, (8.44% working interest before payout and 7.5% after payout) are expected to be placed on production immediately.

Consolidated Rexspar Minerals and Chemicals Limited has a uranium property in British Columbia ready for development, subject to obtaining necessary government authorizations. A provincial Royal Commission on uranium mining is in progress.

Subsidiary	Lake Ontario Cement Limited Aetna Cement Corporation Primeau Argo Block Co. Limited Rochester Portland Cement Corp.  * Percentage held by Lake Ontario Cement Limited †Increased to 100% on January 7, 1980	53.7% 100% * 72.5% *† 100% *
Other	Pacific Tin Consolidated Corporation Reiss Lime Company of Canada, Limited Roman Corporation Limited Standard Trust Company	38.0% 50.0% 14.4% 47.8%
+ /	Argosy Mining Corporation Limited	37.1%

Consolidated Rexspar Minerals & Chemicals Limited

\* On completion of expenditures by Imperial Oil Limited

Black Hawk Mining Limited

Canray Resources Limited

Caspian Resources Limited

Parlake Resources Limited

Quintette Coal Limited

Saxon Coal Limited

Right: The expanded Reiss Lime facility on the north shore of Lake Huron will more than double lime production.

and Developmen

Exploration



## Special Report

## Potash in New Brunswick — a new venture for Denison

The development of production of potash, an essential fertilizer, is one of the major new projects underway in your Company.

By 1983, Denison expects to add this agricultural mineral to its growing list of basic mineral products essential to modern industry and daily living.

The potash project is expected to involve capital expenditures exceeding \$150 million. Denison purchased the potash deposit near Sussex, New Brunswick, in mid-March, 1979.

Twenty-three drill holes from surface have indicated an estimated reserve of about 200 million tons of high-quality potash. These reserves are considered sufficient for an annual production of 1.0 to 1.5 million tons for more than 20 years.

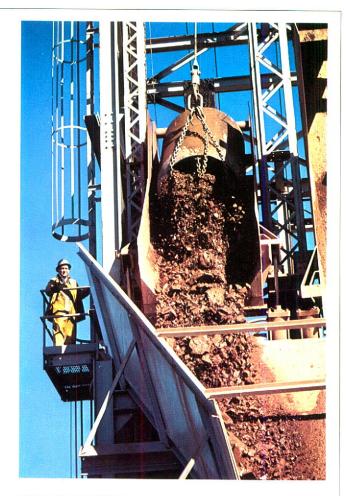
A first-stage development program has been launched, involving sinking of a 16-foot diameter concrete-lined shaft to the potash salt deposit at about 2,400 ft. depth. This shaft is expected to reach its target late in 1980. Underground development across the potash bed and detailed core drilling will follow. The initial phase is expected to be completed in early 1981, providing the detailed information required for planning mining and production capacity.

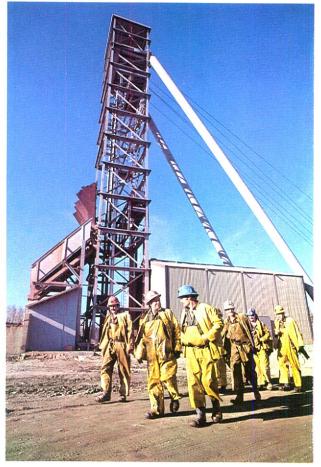
The second stage of the potash project involves development for mining and construction of processing plants on surface. This stage is expected to be carried out through 1981 and 1982 with initial production in early 1983.

Meanwhile, Denison engineering, environmental and marketing specialists are preparing the detailed final studies that will lead to decisions for what promises to become a valuable addition to the growing mineral wealth of the province of New Brunswick.

Shaft sinking at the New Brunswick potash property.

Shaft sinkers leave the headframe area at the end of their shift.





## Consolidated Financial Statements

Annual Report Denison Mines Limited

For the Year Ended December 31, 1979

## Financial Review and Analysis of Operations

A Five Year Summary of the operating and financial history of the Company from 1975 through 1979 is included on page 41 of this Report.

Sales — In 1979 consolidated gross revenue was \$310,508,336. This represents an increase of \$40,619,551 or 15% over the \$269,888,785 reported for 1978 and follows a 36% increase in total revenue from 1977 to 1978. Higher prices in 1979 for all products and the continued low value of the Canadian dollar with respect to the U.S. dollar during the year were only partially offset by slightly lower uranium shipments in recording the \$30,666,145 increase in mineral sales. The increase of \$9,953,406 in cement and cement product sales in 1979 reflects higher product prices.

**Earnings** — Net earnings in 1979 were \$56,092,061, a reduction of \$2,149,075 or 3.7% from 1978. This reduction is attributable to higher uranium production costs and the mining of lower grade ore for much of the year. In addition, oil and gas and mineral exploration costs expensed in 1979 were almost double those of 1978. Finally, other income was significantly lower in 1979 than in 1978.

Capital Spending — In 1979, additions to plant, equipment, employee housing and resource properties totalled \$261,635,658, a record level and more than triple the \$73,393,948 spent in 1978. Expenditures on certain of the Company's major current projects — expansion of uranium facilities in accordance with the Company's agreement with Ontario Hydro, employee housing at Elliot Lake and development of the Prinos Oil Field and South Kavala Gas Field in the North Aegean Sea — accelerated during the year. In addition, the Company commenced the sinking of a shaft on the New Brunswick potash property that it acquired in March, 1979. Other new projects in 1979 included the acquisition of a significant interest in an offshore Gulf of Mexico natural gas development which is expected to commence production in 1980. As a result of this aggressive capital spending program, net fixed assets doubled during the year to \$492,860,514 after deducting depreciation, depletion and amortization charges.

**Taxes** — In 1979, the effective income and mining tax rate was 44.6%, down from the 45.3% rate applied in 1978. This decrease in the effective tax rate in 1979 is primarily due to a substantially larger investment tax credit resulting from increased capital spending.

Financial Position — Funds generated from current operations totalled \$100,144,237 in 1979 while new advances against concentrate sales contracts and mortgages issued in connection with employee housing in Elliot Lake contributed \$59,213,576 and \$15,094,491 respectively. In August, a major financing agreement for funding the development of the North Aegean Sea oil and gas properties, in which the Company has a 68.75% interest, was finalized. Since then, \$84,205,289 has been received as the Company's share of this loan facility. Other sources, including the sale of long-term investments and interests in mineral ventures, provided funds of \$45,043,472 during the year. Purchases of long-term investments and dividends to shareholders required \$24,866,773 and \$21,927,461 respectively. Consequently, working capital decreased by \$9,698,246 during the year after providing for other applications of funds of \$4,969,419, including repayments of long-term debt of Lake Ontario Cement. At December 31, 1979 working capital amounted to \$39,169,831.

## Accounting Policies

Denison Mines Limited for the year ended December 31, 1979

The accounting policies of the Company are in accordance with generally accepted accounting principles. Outlined below are those policies considered particularly significant for the Company.

Basis of Consolidation — The consolidated financial statements include the accounts of the Company and all subsidiaries. Substantially all of the Company's exploration and production activities related to oil and gas are conducted jointly with others and accordingly the accounts reflect only the Company's proportionate interest in such activities.

**Translation of Foreign Currencies** — Foreign currencies have been translated into Canadian dollars as follows: current assets and current liabilities at rates in effect at the end of the year; non-current assets and liabilities and revenue and expenditure items at approximate rates in effect at dates of transactions, except for depreciation and depletion which are translated at the same rates as the related assets.

Inventories — Concentrates and finished and semi-processed cement products are valued at the lower of average cost of production and net realizable value. Operating supplies are valued at the lower of average cost and replacement cost.

Long-term Investments — Investments in companies in which the Company has significant influence are accounted for by the equity method, by which the original cost of the shares is adjusted for the Company's share of earnings or losses less dividends since significant influence was acquired. The treatment of expenditures of mining companies in the exploration stage has been conformed in these consolidated financial statements to the policy followed by the Company. Portfolio investments are carried at cost.

All long-term investments are written down to their estimated inherent worth when there is evidence of a permanent decline below their carried value.

#### **Fixed Assets, Depreciation and Depletion**

- Plant, Equipment and Housing Plant, equipment and housing of the companies are recorded at cost and depreciated, generally on a straight-line basis, over their estimated useful lives except that (a) plant and equipment at the Company's mine properties acquired before 1965 were written off in prior years and (b) oil and gas production equipment is depreciated by the unit of production method.
- Mineral Properties (Mining, Oil and Gas) The Company accounts separately for each group of permits, licences or leases in a designated exploration or development area as a separate area of interest. All exploration costs relating to each area of interest are written off in the year incurred. If it is determined that an area of interest contains economically recoverable reserves, all costs relating to that area for the current and subsequent years are deferred. These deferred costs, together with property acquisition costs, are amortized against related production revenues on the unit of production method based on the area's estimated proven reserves or written off if that property is abandoned.

Development costs incurred for the specific purpose of preparing the existing mine beyond current requirements are also deferred and amortized by the unit of production method.

 Capitalization of Interest — Interest costs (net) on funds borrowed to finance the development and construction of major assets are capitalized during the development and construction period.

**Income and Mining Taxes** — The Company follows the tax allocation method of accounting whereby the provision for income and mining taxes is based upon income reported in the accounts.

The benefits arising from the investment tax credit provisions of the Income Tax Act are treated as a reduction of the current year's income tax provision.

## Consolidated Balance Sheet

Denison Mines Limited as at December 31, 1979

Assets			With the second
		1979	1978
	Current Assets		
	Cash and short-term deposits	\$ 41,163,363	\$ 52,608,400
	Accounts receivable	49,217,493	35,313,831
	Income and mining taxes recoverable	3,014,482	Matrix _ 1
	Concentrate inventories	612,588	1,657,536
	Cement product inventories	8,616,332	6,136,686
	Supplies and prepaid expenses	19,809,187	17,342,219
		122,433,445	113,058,672
	Long-term Investments (note 2)	38,010,371	35,640,021
	Fixed Assets (note 3)	492,860,514	246,108,435
	Other Assets	2,724,867	3,814,430
		\$ 656,029,197	\$398,621,558

## Auditors' Report

To the Shareholders of Denison Mines Limited

We have examined the consolidated balance sheet of Denison Mines Limited as at December 31, 1979 and the consolidated statements of earnings and retained earnings and changes in financial position for the year then ended. For Denison Mines Limited and for those other companies of which we are the auditors and which are consolidated or are accounted for by the equity method in these financial statements, our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances. For other companies consolidated or accounted for by the equity method we have relied on the reports of the auditors who have examined their financial statements.

In our opinion, these consolidated financial statements present fairly the financial position of the Company as at December 31, 1979 and the results of its operations and the changes in its financial position for the year then ended in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Toronto, Canada, January 14, 1980.

COOPERS & LYBRAND Chartered Accountants

Liabilities		
	1979	1978
Current Liabilities		
Accounts payable and accrued charges	\$ 71,940,724	\$ 35,063,210
Dividends payable	852,405	955,387
Income and mining taxes payable		24,563,265
Long-term debt due within one year	4,270,485	1,662,238
Advances on concentrate sales contracts	6,200,000	1,946,495
	83,263,614	64,190,595
Advances on Concentrate Sales Contracts	139,603,574	80,389,998
Long-term Debt (note 5)	136,634,567	39,474,364
Minority Interest in Subsidiary Companies	18,874,441	16,813,160
Deferred Income and Mining Taxes (note 4)	104,147,670	58,412,710
	482,523,866	259,280,827
Shareholders' Equity		
Capital Stock (note 6)		
Authorized — 24,000,000 shares without par value		
Issued and fully paid — 18,272,884 shares	4,568,221	4,568,221
Contributed Surplus	7,937,764	7,937,764
Retained Earnings	160,999,346	126,834,746
	173,505,331	139,340,731
	\$ 656,029,197	\$398,621,558

Signed on behalf of the Board

B. E. Willoughby, Director

E. B. McConkey, Director

# Consolidated Statement of Earnings and Retained Earnings

Denison Mines Limited for the year ended December 31, 1979

Gross Rever		1979	1978
Minerals (	(uranium, limestone products, oil and gas)	\$222,191,187	\$191,525,042
Cement a	and cement products	88,317,149	78,363,743
		310,508,336	269,888,785
Production,	Exploration and Administration Costs	212,189,979	183,363,945
		98,318,357	86,524,840
Other Incom	e (note 7)	27,509,092	38,172,711
Net Earnings	Before Items Shown Below	125,827,449	124,697,551
Deduct:	Depreciation, depletion and		
	amortization	14,914,984	11,909,333
	Interest on long-term debt	4,681,939	3,660,891
		19,596,923	15,570,224
		106,230,526	109,127,327
Income and	Mining Taxes (note 4)	47,390,000	49,410,000
	fore Minority Interest	58,840,526	59,717,327
Minority Inte	rest	2,748,465	1,476,191
Net Earnings	for the Year	56,092,061	58,241,136
	Retained Earnings — Beginning of		
Year		126,834,746	102,398,446
		182,926,807	160,639,582
Dividends —			
Regular		21,927,461	10,963,731
Special, p	aid from 1971 capital surplus on hand		22,841,105
		21,927,461	33,804,836
Balance of R	Retained Earnings — End of Year	\$160,999,346	\$126,834,746
Earnings per	Share for the Year	\$3.07	\$3.19*

<sup>\*</sup> After adjusting for the four-for-one subdivision of shares effective February 23, 1979.

# Consolidated Statement of Changes in Financial Position

Denison Mines Limited for the year ended December 31, 1979

TO SHEED TO SHEED THE SHEE		
Sources of Working Capital	1979	1978
Provided from operations	\$100,144,237	\$ 60,536,527
Increase in advances on concentrate sales contracts	59,213,576	59,789,998
Issue of mortgages on construction and purchase of Elliot Lake housing units	15,094,491	10,123,795
Issue of long-term debt for the Prinos Oil Field and South Kavala Gas Field project,	24 225 222	
Sea of Thrace (note 5(b))	84,205,289	
Decrease in other assets	1,089,563	_
Net proceeds on sale of long-term investments and interests in mineral ventures (note 7)	41,811,251	70,191,073
Other	2,142,658	1,331,333
	303,701,065	201,972,726
Uses of Working Capital		
Additions to fixed assets	261,635,658	73,393,948
Increase in other assets		964,332
Reduction of long-term debt	4,270,485	1,612,238
Purchase of long-term investments	24,866,773	35,195,023
Reclassification of investments from marketable to long-term		4,471,914
Dividends to minority shareholders of Lake Ontario Cement Limited	698,934	398,666
Dividends	21,927,461	33,804,836
	313,399,311	149,840,957
Increase (Decrease) in Working Capital	\$ (9,698,246)	\$ 52,131,769

# Notes to Consolidated Financial Statements

Denison Mines Limited for the year ended December 31, 1979

## 1. Accounting Policies

The information on page 33 presents a summary of significant accounting policies and is an integral part of these financial statements.

# 2. Long-term Investments

79 1978
54 \$ 4,020,536
950,000
4,970,536
16,593,895
14,075,590
30,669,485
\$35,640,021

- (b) The quoted market values referred to above do not necessarily reflect the realizable value of these holdings which may be more or less than that indicated by market quotations.
- (c) Secured loans in note 2(a) above include a loan of \$9,810,000 (\$U.S.10,000,000), plus accrued interest of \$4,563,288, made to Oceanic Exploration Company pursuant to an agreement described in note 8(c).

#### 3. Fixed Assets

Cost at December 31, 1979	Accumulated depreciation, depletion and amortization to December 31, 1979	Amount written off in 1979
\$ 9,737,251	\$ -	\$ -
34,519,412	1,104,152	83,913
31,516,226	4,730,013	597,246
264,888,862	120,498,078	11,287,758
124,895,082	7,911,500	1,789,035
31,322,261	2,441,574	1,157,032
132,666,737	_	_
\$629,545,831	\$136,685,317	\$14,914,984
	\$ 9,737,251 34,519,412 31,516,226 264,888,862 124,895,082 31,322,261 132,666,737	Cost at December 31, 1979  \$ 9,737,251

Included in the total cost at December 31, 1979 is approximately \$141,000,000 related to the exploration and development areas referred to in note 8(b).

Plant, equipment and housing are depreciated at annual rates which vary from 2.5% to 33.3%. Included in plant and equipment at December 31, 1979 are fully depreciated assets of \$70,897,783. Accumulated depreciation, depletion and amortization at December 31, 1978 amounted to \$123,021,947.

## 4. Income and Mining Taxes

The deferred income and mining tax provision for the year amounted to \$45,734,960 (1978 - \$18,573,080).

Unrecorded deferred income taxes in respect of timing differences related to depreciable assets and oil and gas intangibles prior to adoption of the tax allocation method of accounting amount to \$9,336,000.

5. Long-Term Debt (a) This item comprises:	1979	1978
Prinos Oil Field and South Kavala Gas Field project, Sea of Thrace, project loan facility (note 5(b))	\$ 84,205,289	\$ -
Elliot Lake housing mortgages at rates varying from 8% to 12% maturing from 2004 to 2028	34,775,728	19,731,237
	118,981,017	19,731,237
Lake Ontario Cement Limited and subsidiaries — 9.75% debenture due 1994 (note 5(c)) Other (note 5(d))	12,920,000 7,804,035	13,780,000 7,625,365
	20,724,035	21,405,365
Other	1,200,000	
	140,905,052	41,136,602
Repayable within one year	4,270,485	1,662,238
	\$136,634,567	\$39,474,364

(b) In 1979, the Company and the other members of the consortium developing the Prinos Oil Field and the South Kavala Gas Field in the Sea of Thrace arranged to borrow under a project loan facility up to \$U.S.215,000,000 and under an overrun loan facility the balance up to \$U.S.245,000,000 to finance the development of those Fields. The Company's interest in the Fields and its share of the liability in respect of the loans are both 68.75%. The Company's share of the loans as of December 31, 1979 amounted to \$84,205,289 (\$U.S.72,342,875). The facilities being constructed and all the interests of the consortium members in the Fields have been or will be mortgaged or charged as security for the loans. After the facilities have been constructed and the Fields have reached specified levels of operation, the project loans are to be repayable only out of production and the security granted to the lenders except in the event of certain specified losses including certain uninsured losses, principally a loss caused by hostilities. The loans are repayable on or before July 15, 1986 and, subject to certain provisions, are repayable in up to ten half-yearly instalments expected to commence January 15, 1982. Interest on the loans is at a rate equal to the London Interbank Eurodollar Market rate from time to time plus a margin of 1.5% except that, when the project loans become repayable only out of production and the security as referred to above, the margin in respect of the project loans will be increased to 1.9375%.

- (c) The debenture referred to in (a) above is payable in annual instalments of \$860,000 and is secured by a first mortgage on the manufacturing facility in Picton, by a floating charge on substantially all other property, plant and equipment of Lake Ontario Cement Limited and by a pledge of the shares of U.S. subsidiaries.
- (d) Other long-term debt in Lake Ontario Cement Limited, part of which is secured on certain of that company's assets, consists primarily of a term bank loan, promissory notes and mortgages due up to 1983 with interest varying from 8% to U.S. prime plus 1%.
- (e) The debt in \$U.S. has been translated at the rate of exchange in force when the debt was incurred. If the year-end rate were to be used, the total long-term debt would increase by \$732,675.
- (f) The repayment schedule of the debt described in (b) above cannot yet be determined. Repayments of other longterm debt required in 1980 are \$4,270,485, in 1981 are \$3,143,000, in 1982 are \$2,883,000, in 1983 are \$3,400,000, and in 1984 are \$1,357,000.

# 6. Capital Stock

At the annual general meeting of the Company held on February 9, 1979, a resolution to amend the articles of the Company to change each of the Company's shares with a par value of \$1.00 into four shares without par value was approved by the shareholders. The four-for-one share split became effective on February 23, 1979.

# Other Income

(a) Other income comprises:  Gain on sale of interests in mineral ventures, net of commission From companies accounted for by the equity method — income (loss)	<b>1979</b> \$11,059,668 (9,618)	<b>1978</b> \$13,500,000 448,449
From portfolio investments — Gain on disposal of securities Dividends and interest From marketable securities and short-term deposits	8,301,963 3,227,482 2,527,619	15,716,047 4,061,479 4,446,736
Net proceeds received under the Termination Agreement described in note 7(b)	2.401,978 \$27,509,092	<u> </u>

(b) In August, 1979, the Company and certain of its subsidiaries entered into an agreement ("the Merger Agreement") to merge with Reserve Oil and Gas Company ("Reserve"). In October, 1979, the Company and those same subsidiaries entered into an agreement ("the Termination Agreement") with Reserve and Getty Oil Company ("Getty") whereby the Merger Agreement was terminated. Under the Termination Agreement the Company is to receive \$U.S.10,000,000 to reimburse it for the costs incurred in its investigation of Reserve, certain of which costs will be

incurred only upon completion of a merger between Reserve and Getty, for supplying to Getty information obtained during that investigation and for relinquishing its rights under the Merger Agreement. To date \$U.S.3,000,000 has been received and accounted for by the Company. The balance, which will be accounted for upon receipt, is to be received upon the earlier of (a) the consummation of a merger between Getty and Reserve or (b) January 31, 1980 but only if prior to that date Getty and Reserve have not terminated their merger agreement.

# 8. Commitments and Contingencies

- (a) In 1977, the Company entered into an agreement with Ontario Hydro for the sale to the utility of 126,000,000 pounds of uranium oxide, subject to certain provisions as to specified curtailments or reductions and as to termination. The uranium oxide is to be delivered over a 31-year period from 1980 to 2011 under an agreed pricing formula. Fulfilling the agreement will require a major expansion, now in progress, of the plant and mine facilities at Elliot Lake. The utility will make advances to the Company in respect of substantially all the cost of the expansion, which advances will be repaid by the Company over the delivery period. The amount of the advances to December 31, 1979 is \$126,124,715. The Company's Elliot Lake operating properties, facilities and certain other assets related thereto have been mortgaged or charged as security for the funds advanced subject to the Company's right to give prior security for future indebtedness in agreed amounts.
- (b) The Company is participating in the construction and installation of production and processing facilities with respect to two development areas (the Prinos Oil Field and the South Kavala Gas Field) in the Sea of Thrace and one development area (the Casablanca Oil Field) in the Mediterranean, offshore Spain. The remaining cost to complete such construction and installation is estimated at \$U.S.495,000,000 in 1979 dollars, the Company's share of which would be \$U.S.224,000,000.
- (c) Under a purchase agreement entered into in 1976, by which the Company acquired, among other interests, a 68.75% interest in an oil exploration and development area in the Sea of Thrace, the Company is required to pay to Oceanic Exploration Company ("Oceanic"), but only from production, \$U.S.10,000,000 and Oceanic is further entitled to a 15% net earnings interest in the above area, which is to commence when the production payment is completed. Under the purchase agreement the Company loaned to Oceanic \$U.S.10,000,000 (see note 2(c)) for a period of five years provided that in certain circumstances the Company may demand earlier repayment and in such event if such loan, with interest, is not repaid within a stipulated period then it is converted into an oil payment due by Oceanic to the Company in an amount double the loan and accrued interest. Such oil payment will then be payable out of the production payment and net earnings interest payable by the Company to Oceanic. Certain finders' fees in connection with this transaction are payable by the Company out of future production attributable to the interests of the Company in the above area and in the Cameroon area.
- (d) Westinghouse Electric Corporation is continuing proceedings commenced in 1976 in the United States District Court for the Northern District of Illinois against twenty-nine defendants, including the Company and its wholly-owned subsidiary, Denison Mines (U.S.) Incorporated. Tennessee Valley Authority is continuing proceedings commenced in 1977 in the United States District Court for the Eastern District of Tennessee against eight defendants, including the Company. In each action, the plaintiff is claiming relief from alleged illegal combinations and conspiracies entered into by the defendants to restrain both the interstate and foreign commerce of the United States in uranium in violation of the Sherman Antitrust and Wilson Tariff Acts. The plaintiff in each action claims an injunction and treble the damages alleged to be caused to the plaintiff, the extent, if any, of such damages not yet having been ascertained. The Company and Denison Mines (U.S.) Incorporated are of the opinion that the actions are without merit as against them and are defending the actions, denying any illegal actions and asserting a lack of jurisdiction.
- (e) In 1978, a complaint was filed in the United States District Court for the Southern District of New York against the Company and certain others claiming damages of approximately \$U.S.1,300,000 arising out of the sale in October, 1978 by the Company of certain shares of Freeport Minerals Company to Freeport. The Company believes that it is not subject to the jurisdiction of such Court, is of the opinion that the action is without merit as against it and is defending the action.
- (f) In November, 1979, a complaint was filed in the Superior Court of the State of California for the County of Los Angeles against the Company and Getty Oil Company purporting to be a class action on behalf of all the common shareholders of Reserve Oil and Gas Company, except the defendants, and claiming among other things that the payment of \$U.S.10,000,000 described in note 7(b) is unlawful and that the Company should be required to distribute such amount among the class. The Company believes that it is not subject to the jurisdiction of such Court, is of the opinion that the action is without merit as against it and intends to defend the action if it proceeds.
- (g) The Company has guaranteed payment of both principal and interest of a loan to Quintette Coal Limited, an affiliated company, of \$U.S.5,332,887. The loan matures in 1984 and bears interest at a rate selected by the borrower, from time to time, equal to any of the London Interbank Eurodollar Market rate, the U.S. base rate or the Canadian prime rate plus margins of up to 0.75%.
- (h) In addition to the projects referred to in notes 8(a) and (b), major projects authorized as of December 31, 1979 will require estimated capital and exploration expenditures of \$107,000,000.
- (i) Based on the most recent actuarial evaluations, unfunded past service pension liabilities of the companies amount to \$6,422,389. This amount is being funded and expensed over periods from 11 to 18 years. The total charge against operations in 1979 with respect to past service liabilities amounted to \$857,425 including interest.
- (j) The companies have existing lease agreements, primarily for shipping facilities and real property, for which the minimum annual aggregate rentals total approximately \$3,000,000.

## 9. Remuneration of Directors and Senior Officers.

Direct remuneration received by the directors and senior officers in 1979 amounted to \$1,847,153 (1978 — \$1,178,241).

# Five Year Summary

**Denison Mines Limited** 

Production Data	1979	1978	1977	1976	1975
Tons milled	2,440,000	2,404,000	2,059,000	1,522,000	1,340,000
Average grade (lbs. U <sub>3</sub> O <sub>8</sub> per ton)	2.03	2.15	2.07	2.16	2.30
Pounds U <sub>3</sub> O <sub>8</sub> produced	4,495,767	4,889,000	4,001,000	3,112,000	2,911,000
Crude oil (bbls.)	1,593,000	1,658,000	1,688,000	1,712,000	1,941,000
Natural gas (mcf)	3,828,000	3,393,000	3,149,000	2,100,000	2,188,000

# **Consolidated Financial Data**

Sales	\$310,508,336	\$269,888,785	\$199,062,733	\$160,058,677	\$139,855,498
Net earnings for the year	56,092,061	58,241,136	27,878,009	15,043,214	26,517,784
— per share*	3.07	3.19	1.53	0.82	1.45
Dividends paid	21,927,461	33,804,836**	* 10,050,086	9,136,442	8,451,209
- per share*	1.20	1.85**	* 0.55	0.50	0.46
Working capital (deficiency)	39,169,831	48,868,077	(3,263,692)	91,269	43,232,005
Additions to fixed assets	261,635,658	73,393,948	56,058,178	52,296,443	26,361,343
Shareholders' equity	173,505,331	139,340,731	114,904,431	97,076,508	91,169,736
— per share*	9.50	7.63	6.29	5.31	4.99

<sup>\*</sup> After adjusting for the four-for-one subdivision of shares effective February 23, 1979.

<sup>\*\*</sup> Includes a special dividend of \$1.25 per share paid in 1978 out of 1971 capital surplus on hand.



Stephen B. Roman, K.C.S.G., LL.D. Chairman and President, Chief Executive Officer

C. H. Frame Executive Vice-President, Mining Operations

C. D. Parmelee Vice-President, Corporate Affairs

R. C. Hermann Vice-President, Coal Operations

R. J. Miller Vice-President, Exploration

A. F. Risso Vice-President Administration

K. H. Bates Vice-Presider

K. H. Barnes Controller E. B. McConkey Vice-President, Finance

M. J. de Bastiani Vice-President, Technical Operations

L. L. Samoil Vice-President, Oil and Gas Operations

W. N. O'Brien Vice-President, Minerals and Marketing

V. L. Chapin Vice-President

C. G. Fullerton Treasurer

S. S. Hultgreen General Counsel and Secretary

Donald S. Anderson

M. J. de Bastiani

Charles F. W. Burns

C. H. Frame

F. H. Jowsey

John Kostuik

E. B. McConkey

A. Hamilton McDonald

John A. Mullin, a.c.

Joseph A. Patrick

Stephen B. Roman

George Rowe, Jr.

B. E. Willoughby

# **Denison Mines Limited**

# Corporate Headquarters

Royal Bank Plaza Suite 3900, South Tower P.O. Box 40 Toronto, Ontario Canada M5J 2K2 Telephone (416) 865-1991 Telex 065-24135 (Denmines Tor)

## **Elliot Lake Office**

Uranium Division P.O. Box B-2600 Elliot Lake, Ontario P5A 2K2 Telephone (705) 848-9111 Telex 067-7511 (Denmines Ellk)

#### **New Brunswick Office**

Potash Project P.O. Box 638 Sussex, New Brunswick E0E 1P0 Telephone: (506) 839-2146 Telex: 004-47541 (Denmines Clhl)

# Calgary Office

Oil & Gas Division Suite 1500 444-5th Avenue S.W. Calgary, Alberta T2P 2T8 Telephone (403) 269-4327 Telex 038-25739 (Denmines Clg)

## Denison Mines (U.S.) Incorporated

Suite-810 1776 Lincoln Street Denver, Colorado 80203 Telephone (303) 839-5239 Telex 004-5762 (Denmines Dvr)

# Vancouver Office

Coal Division
P.O. Box 11575
Vancouver Centre
650 West Georgia Street
Vancouver, B.C.
V6B 4N7
Telephone (604) 669-2226
Telex 045-1547 (Denmines Vcr)

# Greece

Prinos/South Kavala Project North Aegean Petroleum Company 2, Kapadistriou St. and Kiffissias Ave. Filothei Athens, Greece Telephone: 6814,442 Telex: 218315 (Napc Gr)

## Registrar and Transfer Agent

Guaranty Trust Company of Canada, Toronto, Ontario Montreal, Quebec Calgary, Alberta

#### **Bankers**

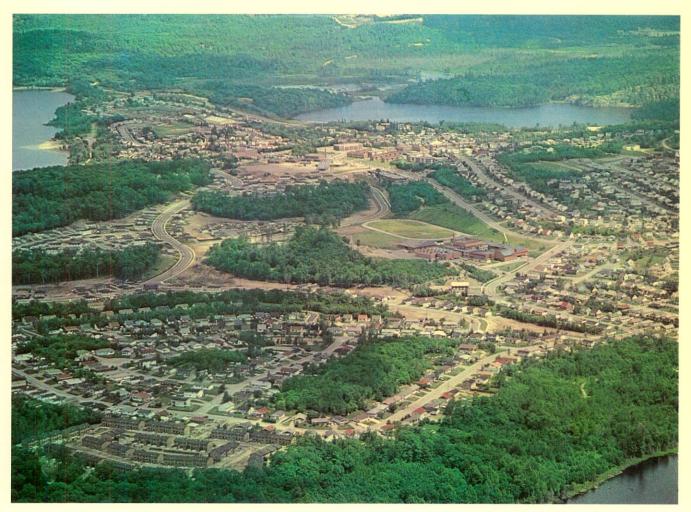
The Royal Bank of Canada, Toronto, Ontario

# **Auditors**

Coopers & Lybrand, Toronto, Ontario

#### Solicitors

Fraser & Beatty, Toronto, Ontario



Elliot Lake: Uranium and the nuclear age created the town of Elliot Lake, Ontario. For almost a quarter of a century, Canadians have lived, worked, played, raised families, built businesses here — all the while wresting valuable uranium for nuclear fuel from the depths of the Canadian Shield.

Elliot Lake today is the address for almost 15,000 people. In a few years, with the completion of expansion programs by the uranium producers in the area, Elliot Lake is expected to be home for almost 30,000. These men, women and children will be living in one of the most modern communities in Canada, frequently described as "a jewel in the wilderness" — houses, schools, hospitals, community arenas, shopping centres

nestled among the evergreens, birches, maples and sparkling freshwater lakes in the Algoma district.

Since the earliest days of development, Denison people and resources have played an important part in creating the physical amenities — the homes, recreation and other facilities. Included in Denison's expansion plan is construction of housing for the use of our employees. The provision of 2,000 housing units by 1984 is an integral part of the Company's activities in Elliot Lake and includes apartments, townhouses, semi-detached and detached homes — a complete range of fully equipped residences typical of a modern Canadian community.

