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RIO ALTO EXPLORATION LTD.
ANNUAL REPORT 1979

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CORPORATE INFORMATION

DIRECTORS

Ronald J. Allen	Vancouver, B.C.
Carman W. Byler	Calgary, Alberta.
Edward A. Brownless	Calgary, Alberta.
H. Graham Gammell	Calgary, Alberta.
Douglas W. Hilland	Calgary, Alberta.
Francis C. Mannas	Calgary, Alberta.
Julio Poscente	Calgary, Alberta.

OFFICERS

Douglas W. Hilland	President
Edward A. Brownless	Executive Vice President
Lori C. Todrick	Secretary
John J. Barclay	Treasurer

HEAD OFFICE

710, 610 - 8th Ave. S.W.,
Calgary, Alberta.
T2P 1G5

SUBSIDIARIES

North American Nuclear Limited
Gamma Resources Ltd.

BANK

Royal Bank of Canada

TRANSFER AGENT AND REGISTRAR

Canada Trust Company

LEGAL COUNSEL

McLaws & Company

AUDITORS

Collins Barrow

STOCK LISTING

Alberta Stock Exchange

The Annual Meeting will be held at
3:00 p.m. June 26, 1980 in the Penthouse of
the Palliser Hotel, Calgary, Alberta.

TO THE SHAREHOLDERS

The year 1979 was one of active field operations in the Yukon Territory and, from a corporate point of view, it was also a time for consolidation and creating the basis for future increased activities in the resource industry.

In the Yukon, geological and geophysical programs were successfully completed at our two active prospects, Rusty Springs and Stormy Mountain. These activities will be outlined in the details of this Report.

Our deficit cash position existing at the end of the 1978 fiscal year was remedied by the sale of 574,487 shares at \$1.45 per share under a fully subscribed rights issue in June of 1979 to yield the treasury \$780,000. This increase in working capital and the reimbursement of the Company for exploratory operations in the Yukon under Joint Venture Agreements referred to in this Report, enabled the Company to end 1979 in a strong cash position. Working capital increased from a deficit of \$27,899, during 1978 to \$813,461 during 1979. It is expected the Company's cash flow for 1980 will increase substantially over 1979.

A significant achievement during the past year was the conclusion of two Joint Venture Agreements with E & B Explorations, Inc., a corporation funded from West Germany. Under these Agreements, E & B was granted the right, by virtue of a series of specified expenditures, to earn increasing working interests at both the Rusty Springs and Stormy Mountain prospects in the Yukon. E & B may earn its maximum interest in these two prospects by a total expenditure of \$3,000,000 on projected exploration. Under each agreement, the Company will retain an interest in the prospect which should be within our ability to finance if projected exploration programs prove commercial reserves of ore.

As indicated in the last Report to Shareholders, increased emphasis would be placed on petroleum activities but not to the detriment of our pursuit of mining prospects. In line with this policy, the Company engaged Mr. E. A.

Brownless, P. Geol. as Executive Vice-President and Manager during December of 1979. Mr. Brownless brings to the Company some thirty years of experience as a Geologist and exploration Executive in the petroleum industry of Western Canada. We expect Mr. Brownless will make a significant contribution to the Company's future growth both in Canada and the U.S.A. In addition, Mr. P. S. White, P. Eng., who has acted as a mining consultant to the Company at various times since 1976, has been retained as a Consultant to the Company to supervise and co-ordinate various mining activities and search for new mining prospects.

Your Directors believe that Rio Alto has shown a history of steady growth over the years and has now achieved a position where its future expansion as a resource corporation may be accelerated.

As part of the Company's long range planning, your Directors have decided to create a class of preferred shares as set forth in the Notice of Meeting. It is anticipated that these shares will be used to acquire revenue producing assets and that the various provisions as to interest rate, conversion privileges and other matters will be determined by the Company's Directors when required.

The support of our shareholders, our small staff as well as professional consultants, especially during the past year of corporate change, is greatly appreciated by the Company's Directors.

Respectfully submitted on behalf of the Board



D. W. HILLAND,
President

MINING ACTIVITIES

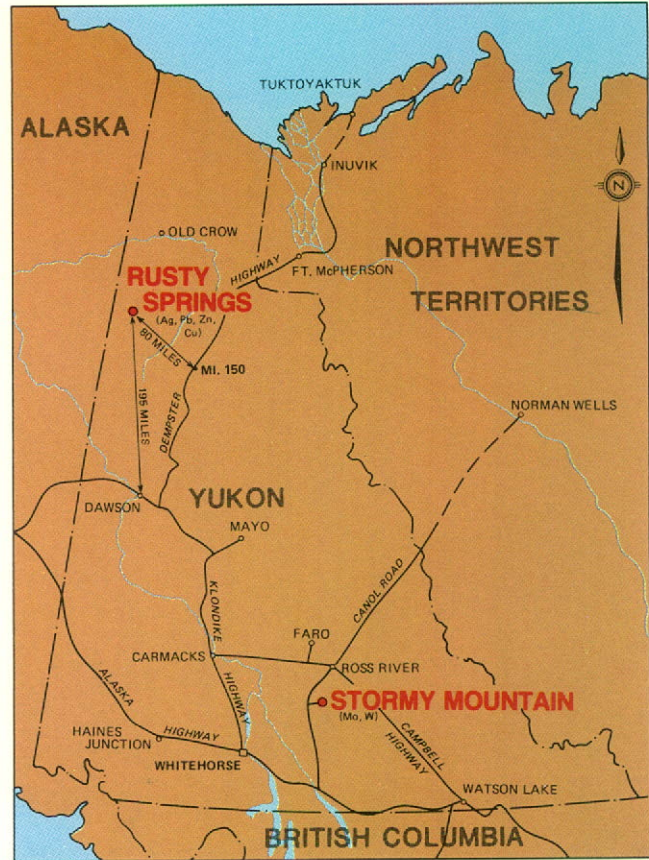
RUSTY SPRINGS — Yukon

The Company continued to explore a large claim block known as the Rusty Springs prospect situated some 175 miles north of Dawson City in the Yukon. High grade silver, lead, zinc and copper mineralization has been encountered in exploratory work to date. These claims have been under active exploration since 1976. Additional claims were staked in 1979 with the result that the Prospect now comprises some 23,759 acres of mineral rights held by the Company and its joint venture associate, E & B Explorations, Inc.

During 1979 Rusty Springs was the site of geological and geophysical surveys to complete basic exploratory data before considering major joint venture participation necessary for the financing of a major drilling program capable of recovering large diameter cores. These surveys were successful and resulted in the discovery of numerous new mineral showings based on the field testing of the geological model. The geophysical work established three new major drilling targets which were not apparent from surface geological work.

The 1980 evaluation program at Rusty Springs will be carried out by means of a 10,000 foot diamond drill core program of 100 to 300 foot holes located mainly on the Orma Zone. This Zone, which has been drilled and bulk sampled in previous programs, is the main target for silver-base metal ore reserves sufficient to justify development of the existing mineral occurrences. However, it is also intended to drill deeper holes on at least two other major targets before completing the 1980 drilling program, which is estimated to cost approximately \$1,100,000.

With respect to the question of accessibility, tractor-train sleighs again travelled some eighty miles over a previously used winter road during the winter of 1980 to move in equipment, supplies and fuel for the summer program. This work was carried out with all governmental and environmental approvals and further indicates that the

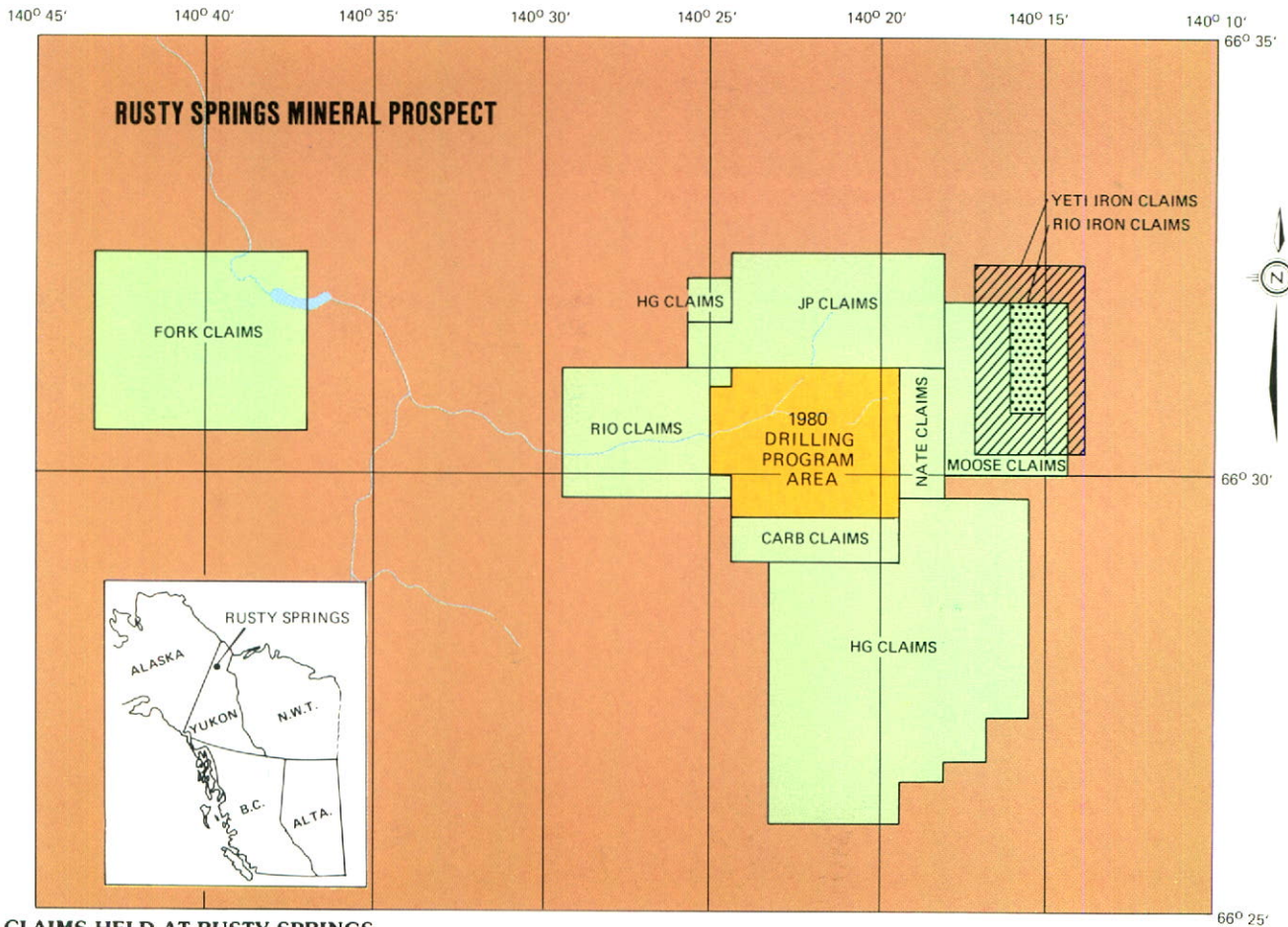


LOCATION MAP OF RUSTY SPRING AND STORMY MOUNTAIN PROPERTIES

Rusty Springs prospect could be adequately serviced by a winter road. For the first time a bulldozer with full supporting equipment was left at Rusty Springs for future use in trenching, movement of equipment and air strip maintenance. The availability of this equipment should considerably increase the scope and efficiency of the 1980 exploration program.

In addition to the exploration program conducted at Rusty Springs during 1979, findings published by the Geological Survey of Canada caused the Company to stake an additional block of 80 claims, located six miles

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CLAIMS HELD AT RUSTY SPRINGS

west-northwest of Rusty Springs. These claims were acquired by staking after the discovery of anomalous nickel, copper and iron values in this area of geological interest. This group of claims, known as the Fork group, has been included in the E & B Explorations, Inc. - Rio Alto Joint Venture Agreement area.

In mid-season of 1979, negotiations were commenced with E & B Explorations, Inc., which culminated in the signing of a Joint Venture Agreement. Under this

Agreement, E & B Explorations, Inc. may earn a maximum 70% interest in the Rusty Springs prospect by assuming 100% of exploration costs to a maximum of \$2,400,000 by December 31, 1983. Included in these earning provisions is the reimbursement of our 1979 program costs of approximately \$350,000. Rio Alto is the Operator of the project.

STORMY MOUNTAIN — Yukon

The Company holds a block of some 100 mineral claims situated near Ross River in the Yukon and known as the Stormy Mountain prospect. These claims were acquired or staked early in 1979. The original 4 claims were the subject of various exploratory work going back to 1955. An exploratory adit exists on the prospect extending some 200 feet into the side of the mountain. This adit shows proven reserves of high grade molybdenum as well as other metals. Limited surface work was conducted some years ago in a small area adjacent to the adit and this work shows other occurrences of molybdenum and other minerals which caused the Company to carry out additional staking last year.

During the fall of 1979 the Stormy Mountain prospect was the subject of an underground and surface exploration program to test the validity of exposed high-grade molybdenum in Zone A. The old adit was opened up, partially de-iced, restored and sampled in high-grade zones at a consistent average of 5% MoS₂ over 8 foot (mining) widths. Bulk sample testing was performed on a representative sample of the Zone A material. Preliminary mill tests were favourable as to recovery grades and cleanliness of MoS₂ product. Surface exploration indicated several new targets for trenching and possible drilling during the 1980 season.

A representative of E & B Explorations, Inc. visited the property in July of 1979 and a second Joint Venture Agreement was negotiated which provides for the acquisition by E & B of a 75% participating interest by expenditure of 100% of exploration costs to a maximum of \$600,000. Included in this earning expenditure is payment of our 1979 program costs of approximately \$135,000. E & B Explorations, Inc. plans to complete its exploration expenditure of \$600,000 during 1980. Rio Alto is the operator of this project.

The Stormy Mountain molybdenum-tungsten deposit will benefit from both exploration and development programs in 1980. Underground drilling and intensive

surface exploration are planned to commence at the end of May to verify present reserves and search for new reserves to sustain long term development of the property.

Development work at Stormy Mountain during 1980 includes total de-icing of adit workings, underground mining of selected high grade zones for direct shipping and hand sorting ore for further metallurgical testing. A mill is being assembled in transportable units for erection on completion of an anticipated favourable feasibility study. However, the restrictions of seasonal operations and widely fluctuating metal prices will require careful assessment of ore reserves during the 1980 program before setting final mill construction dates. Site preparation, water supply facilities and mill lay-out engineering will be carried out in conjunction with the 1980 underground and surface exploration programs. Favourable results may result in the acceleration of the mill assembly.



Paul S. White underground at Stormy Mountain Prospect.

OTHER MINERAL ACTIVITIES

The Company continues to hold, through subsidiaries and in association with other companies, significant interests in uranium, copper, lead, zinc and other minerals in Ontario, British Columbia, the Yukon and Northwest Territories. All properties held are undergoing normal assessment work programs in 1980, as in 1979.

The Elliot Lake uranium properties held by the Company's subsidiary, North American Nuclear Limited are being maintained pending further development in the area of the claims.

A gold prospect has been acquired by the Company near Atlin, British Columbia. A 60 claim group at Little Spruce Creek was acquired by option after research of old records showed extensive trenching and drilling work performance in the 1950's. Trench channel samples averaged 0.10 - 0.50 oz/ton of gold over narrow mining widths. A \$25,000 exploration program is planned for 1980 to verify the old assays by re-sampling and to prospect for additional gold zone occurrences with a view to establishing drilling targets for 1981. With the current gold price being approximately \$500 U.S. per ounce, the property is believed to have considerable merit for future development.

In summary, Rio Alto is conducting the largest mineral exploration and development program in its history with total expenditures by the Company and joint venture associates being projected at approximately \$2,000,000 in 1980. The programs in the Yukon provide the potential for proving of commercial mineral deposits. However, the current rapidly changing metal prices will require continued careful appraisal of these Yukon programs as they progress.

PETROLEUM AND NATURAL GAS

During 1979 the Company began an expansion of its activities in the petroleum and natural gas industry, which included: the engagement of Mr. E. A. Brownless as Executive Vice-President; the acquisition of varying royalty interests in the Nisku area of Alberta from Provost Petroleum Ltd. and commencement of activities in the U.S.A. Accordingly, the Company is now in a position to aggressively pursue a program of acquiring and developing petroleum and natural gas interests during the coming year. The Company has acquired, or is in the process of acquiring, interests in producing properties in the States of Texas and Kansas and plans to participate in the drilling of eight gas wells in Pennsylvania. A United States subsidiary corporation is being established in Texas.

The decision to commence operations in the United States was based on the more favourable economics of producing oil at \$40.00 per barrel and gas at \$2.38 per Mcf as against substantially lower prices for oil and the political uncertainties existing in Canada. However, the Company also plans to step up activities in Canada in anticipation that the current political problems will be stabilized during 1980. The main petroleum and natural gas properties are summarized in this part of the Report.

CANADA

Doddsland Field, Saskatchewan

Rio Alto participated to the extent of 50% in the drilling of three development wells in the Doddsland field during the past year. These three new wells were completed as oil wells in the Viking sand. The Company now has an interest in 20 producing wells in Saskatchewan. Production from these wells in 1979 was approximately 18,580 barrels of light gravity oil. Additional wells are being planned for the coming year.



Producing Gas Well — Cessford, Alberta.

Hilda, Alberta

Gas production from the Hilda Unit No. 2, comprising some 85 gas wells situated north of Medicine Hat, has continued to maintain a steady cash flow for the Company. The Company's working interest will be increased from approximately 0.7% to 1.75% when payout is reached, which is expected in 1980.

UNITED STATES

The Company has entered into a Joint Venture Agreement with M.V.A. Explorations Ltd. of Calgary, Alberta to participate in potential petroleum and natural gas prospects in Kansas and Texas to the extent of working interest ranging from 12.5% to 17.71%. These prospects are summarized below.

Texas

The Texas property is situated in Howard County, Texas, near the town of Cohoma, approximately 100 miles east of Midland, and is adjacent to the Cohoma Fusselman oilfield. The initial Cohoma well resulted in a new discovery in the Mississippian formation. The Company and its associates in the prospect have earned a 12.5% working interest in 480 acres. Follow-up wells will be drilled once steady production has been established.

Kansas

The Kansas properties are adjacent to the town of Longton, some 80 miles south-east of the City of Wichita. The initial program resulted in 6 oil wells, which were completed in known producing horizons of the Pennsylvania sequence at a depth of approximately 800 feet. Production from these initial 6 wells is expected to average a gross 100 barrels of oil per day. The Company's interest in these wells is 17.71%. Additional wells are expected to be drilled in the fall of 1980.

Pennsylvania

The Company is concluding agreements involving two separate prospects in Pennsylvania. The main objective is gas production from the lower Silurian Age Medina sandstone. The Medina sandstone has been producing in the area for nearly one hundred years but new completion techniques and increased gas prices in the U.S.A. have made this area attractive for new drilling programs. The Company expects to participate to the extent of a 10% working interest in an initial program of 8 wells.

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Union City

This prospect is approximately 25 miles south-east of Erie, Pennsylvania. Three wells will be drilled to the Medina on this property and placed on production immediately after they have been completed. The Company will earn a 10% working interest in the 209 acres in the prospect.

Elk Creek

The Elk Creek prospect comprises some 1,990 acres situated in Erie County, Pennsylvania, approximately 30 miles south-east of the town of Erie. The Company expects to participate in the drilling of 5 wells to the Medina to earn a 10% working interest in the prospect. Access to the Columbia Gas Transmission Corporation proposed gathering pipeline is within five miles of the drill locations. This pipeline is expected to be completed by the end of 1980 and hook-up of the Elk Creek wells will be made at that time.



Producing well at Dodsland.

Gamma Resources Ltd., a wholly owned subsidiary of the Company, continues to carry out operations at Cessford, Alberta, where a gas well, which blew wild in 1977, was placed on steady production in March of 1979. This well has proven to be an excellent producing well and, despite costs incurred in the blow-out and control operations, should pay out all expenditures during 1980. Rio Alto Exploration Ltd., through share ownership of Rio Alto Development Co. Ltd., which is managed by the Company, will hold, by virtue of its share ownership, a 5.985% interest in the well and some three sections of petroleum and natural gas rights after payout. Further development of this prospect will depend upon the availability of a gas sales contract.

Management is now considering the utilization of Gamma Resources Ltd. in the formation of a new drilling fund during 1980. In addition the Company is currently evaluating prospects in Canada and the United States and plans to expand its oil and gas exploration and development in both countries consistent with its resources. We expect that the development of present prospects will significantly increase the Company's revenue and thereby enable it to participate more aggressively in land acquisition and exploration during 1980.

AUDITORS' REPORT

To the Shareholders
Rio Alto Exploration Ltd.

We have examined the consolidated balance sheet of Rio Alto Exploration Ltd. as at December 31, 1979 and the consolidated statements of earnings, deficit and changes in financial position for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, subject to the realization of mining properties as outlined in note 1, these consolidated financial statements present fairly the financial position of the company as at December 31, 1979 and the results of its operations and 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.

Calgary, Alberta
February 8, 1980

Collins Barrow
CHARTERED ACCOUNTANTS

RIO ALTO EXPLORATION LTD.

CONSOLIDATED BALANCE SHEET DECEMBER 31, 1979

ASSETS		<u>1979</u>	<u>1978</u>
Current assets			
Cash	\$ 48,372	\$ 28,191	
Term deposits	288,000	61,000	
Accounts receivable	659,408	80,736	
Income taxes recoverable	54,393	—	
	<u>1,050,173</u>	<u>169,927</u>	
Property and equipment (note 2)	1,656,012	1,274,559	
Other assets	60,986	54,234	
	<u>\$2,767,171</u>	<u>\$1,498,720</u>	

Approved on behalf of the Board,

 , Director

 , Director

The accompanying notes are an integral part of these consolidated financial statements.

LIABILITIES

	<u>1979</u>	<u>1978</u>
Current liabilities		
Bank demand loans	\$ —	\$ 54,268
Accounts payable and accrued liabilities	236,712	73,835
Income taxes payable	—	69,723
	<u>236,712</u>	<u>197,826</u>
Long-term debt (note 3)	<u>50,338</u>	—
Deferred income taxes	<u>104,413</u>	—

SHAREHOLDERS' EQUITY

Share capital (note 4)		
Authorized		
6,000,000 shares of no par value		
Issued		
3,573,822 shares (1978 - 2,872,435 shares)	2,466,465	1,446,181
Deficit	<u>(90,757)</u>	<u>(145,287)</u>
Contingent liability (note 5)	<u>2,375,708</u>	<u>1,300,894</u>
	<u>\$2,767,171</u>	<u>\$1,498,720</u>

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CONSOLIDATED STATEMENT OF EARNINGS YEAR ENDED DECEMBER 31, 1979

	<u>1979</u>	<u>1978</u>
Income		
Oil and gas sales, net of royalties	\$270,674	\$184,827
Preproduction royalties	18,000	18,000
Interest, management fees and other	69,423	21,357
	<u>358,097</u>	<u>224,184</u>
Expenses		
Production	79,794	64,908
Cost of mining property abandoned	—	7,631
General and administrative	137,918	131,294
Interest on long-term debt	9,608	—
Depreciation	10,229	11,194
Depletion	20,000	1,686
	<u>257,549</u>	<u>216,713</u>
Earnings before income taxes	100,548	7,471
Income taxes — current (recovered)	(58,395)	68,762
— deferred (recovered)	104,413	(1,319)
	<u>46,018</u>	<u>67,443</u>
Net earnings (loss)	\$ 54,530	\$ (59,972)
Earnings (loss) per share	\$ 0.02	\$ (0.02)

The accompanying notes are an integral part of these consolidated financial statements

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CONSOLIDATED STATEMENT OF DEFICIT YEAR ENDED DECEMBER 31, 1979

	<u>1979</u>	<u>1978</u>
Deficit, beginning of year	\$(145,287)	\$ (85,315)
Net earnings (loss)	54,530	(59,972)
Deficit, end of year	<u>\$ (90,757)</u>	<u>\$(145,287)</u>

The accompanying notes are an integral part of these consolidated financial statements

CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION YEAR ENDED DECEMBER 31, 1979

	<u>1979</u>	<u>1978</u>
Source of working capital		
Operations		
Net earnings (loss)	\$ 54,530	\$ (59,972)
Add (deduct) items not affecting working capital		
Cost of mining properties abandoned	—	7,631
Depreciation and depletion	30,229	12,880
Deferred income taxes	104,413	(1,319)
Working capital provided by (used in) operations	189,172	(40,780)
Proceeds on issue of share capital	1,020,284	654,910
Long-term debt	50,338	—
	<u>1,259,794</u>	<u>614,130</u>
Use of working capital		
Additions to property and equipment	411,682	690,803
Increase in other assets	6,752	500
	<u>418,434</u>	<u>691,303</u>
Increase (decrease) in working capital	841,360	(77,173)
Working capital (deficiency), beginning of year	(27,899)	49,274
Working capital (deficiency), end of year	<u>\$ 813,461</u>	<u>\$ (27,899)</u>

The accompanying notes are an integral part of these consolidated financial statements

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS DECEMBER 31, 1979

1. Summary of significant accounting policies

(a) Principles of consolidation

The consolidated financial statements include the accounts of the company and the accounts of its subsidiaries all of which are wholly owned.

(b) Oil and gas operations

The company follows the full cost method of accounting for oil and gas operations wherein all costs relating to the exploration for and development of oil and gas reserves are capitalized and depleted on the unit of production method based on estimated recoverable reserves of oil and gas as determined by independent and company engineers. Proceeds on minor property sales are credited to the net book value of property and equipment without recognizing any gain or loss on disposition. Gains or losses on major property sales are recognized in the earnings statement.

(c) Joint venture accounting

A substantial portion 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.

(d) Mining operations

The company follows the practice of capitalizing all acquisition and exploration costs relating to mining operations on a prospect area. If a prospect area is subsequently abandoned or sold, all capitalized costs relating to the area are charged to earnings. Realization of the amounts represented by mining properties is dependent upon future development, since the properties are substantially unexplored or undeveloped.

(e) Depreciation

Depreciation of production equipment is also provided for on the unit of production method. Depreciation of sundry equipment is provided for on the declining balance method at rates varying from 20% to 30% per annum.

(f) Earnings per share

Basic earnings per share have been calculated using the weighted average number of common shares outstanding during the year.

The exercising of share options would not be dilutive.

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2. Property and equipment

The following is a summary of property and equipment:

	1979			1978
	Cost	Accumulated Depreciation and Depletion	Net	Net
Oil and gas properties including exploration and development costs thereon	\$ 508,212	\$ 56,799	\$ 451,413	\$ 123,501
Mining properties including exploration costs thereon	1,124,378	—	1,124,378	1,094,955
Production equipment	90,088	28,845	61,243	33,956
Sundry equipment	46,894	27,916	18,978	22,147
	<u>\$1,769,572</u>	<u>\$113,560</u>	<u>\$1,656,012</u>	<u>\$1,274,559</u>

3. Long term debt

The long-term debt consists of a bank loan secured by oil and gas properties which is repayable out of future production proceeds, and accordingly, is not expected to require the use of existing working capital; therefore, no portion of this loan has been reclassified to current liabilities. It is anticipated that \$15,000 will be paid on this loan in the next fiscal year.

4. Share capital

(a) During 1979 the company issued 701,387 additional shares for \$1,020,284 as follows:

	1979		1978	
	Number of shares	Amount	Number of shares	Amount
Exercise of employee share options	1,900	\$ 2,850	21,100	\$ 31,650
Exercise of other share options	—	—	70,000	52,500
Shares issued for cash	—	—	250,000	495,760
Exercise of share purchase rights, net of issuance costs	574,487	786,434	—	—
Shares issued as consideration for mining and oil and gas properties	125,000	231,000	42,613	75,000
	<u>701,387</u>	<u>\$1,020,284</u>	<u>383,713</u>	<u>\$654,910</u>

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(b) At December 31, 1979, 252,500 shares were reserved for options as follows:

Directors, officers and employees			
Number of shares	Price	Date granted	Date exercisable to
5,000	\$1.50	February 16, 1978	February 16, 1980
40,000	2.00	February 16, 1979	February 16, 1981
5,000	2.00	February 16, 1979	February 16, 1981
5,000	2.00	February 16, 1979	February 16, 1981
7,500	1.65	November 26, 1979	November 26, 1982
100,000	1.65	December 10, 1979	December 10, 1983
<u>162,500</u>			
Other			
Number of shares	Price	Date granted	Date exercisable to
70,000	\$0.85 - 0.90	August 24, 1976	September 1, 1981
10,000	2.15	July 9, 1979	July 9, 1981
10,000	1.65	December 6, 1979	December 6, 1981
<u>90,000</u>			
<u>252,500</u>			

5. Contingent liability

A subsidiary company has guaranteed the bank indebtedness of the participants of a joint venture in the amount of \$193,416. This bank indebtedness is also secured by the oil and gas properties of the joint venture and revenue from production.

6. Remuneration of senior officers and directors

The total remunerations paid to directors and officers of the company (including the five highest paid employees) amounted to \$40,308 (1978 - 33,502).

