Annual Report 1977

Alberta Natural Gas Company Ltd

Alberta Natural Gas Company Ltd

240 - 4th AVENUE S.W., CALGARY, ALBERTA T2P 0H5

Directors

J. F. Bonner, *San Francisco, California*
President and Chief Executive Officer,
Pacific Gas and Electric Company

H. Booth, *Calgary, Alberta*
President and Chief Executive Officer,
Alberta and Southern Gas Co. Ltd.

R. W. Brooks, *San Francisco, California*
Vice-President, Gas Supply,
Pacific Gas and Electric Company

D. R. Fenton, *Calgary, Alberta*
Senior Vice-President,
Alberta and Southern Gas Co. Ltd

H. L. Lepape, *Los Angeles, California*
President,
Pacific Interstate Transmission Company

R. A. MacKimmie, Q.C., *Calgary, Alberta*
Partner,
MacKimmie Matthews

C. O. Nickle, Calgary, *Alberta*
President,
Conventures Limited

R. H. Peterson, *San Francisco, California*
Chairman of the Board,
Pacific Gas and Electric Company

J. S. Poyen, *Calgary, Alberta*
Oil and Gas Management Consultant

Officers

R. A. MacKimmie, *Chairman of the Board*
H. Booth, *President and Chief Executive Officer*
D. R. Fenton, *Senior Vice-President*
J. E. Goudie, *Vice-President, Finance and Administration*
G. D. Barnes, *Vice-President, Operations*
G. W. Sinclair, *Vice-President, Engineering and Construction*
F. G. Homer, *Secretary*
H. B. Sanderson, *Treasurer*
G. J. Clark, *Comptroller*

Auditors

Deloitte, Haskins & Sells
Chartered Accountants, Calgary, Alberta

Transfer Agent and Registrar

(Capital Stock and 8½ % First Mortgage Pipe Line Bonds, Series C)
Montreal Trust Company,
Montreal, Toronto, Winnipeg, Regina, Calgary, Vancouver
Notice of change of address should be sent to the Transfer Agent

Common Shares Listed

Alberta, Toronto, Montreal and Vancouver Stock Exchanges

Financial Highlights

	1977	1976
Operating revenue	**$52,387,000**	$47,317,000
Net income	**5,787,000**	5,701,000
Income per average outstanding common share	**4.85**	4.78
Dividends paid per common share — annual rate	**1.72(1)**	1.62
Common equity — total at year end	**33,426,000**	29,601,000
— per share	**28.02**	24.82
Construction expenditures	**15,318,000**	271,000

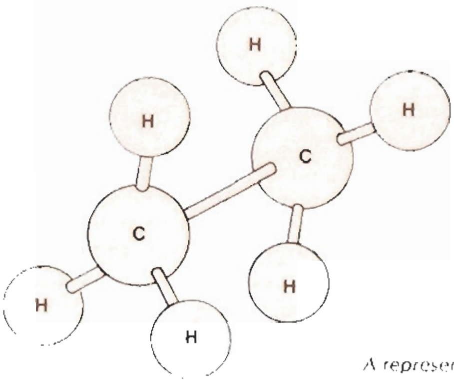
Note: (1) Effective December, 1977.

Annual Meeting

The Annual Meeting of Shareholders will be held at the Calgary Inn, Calgary, Alberta, on Friday, the 28th day of April, 1978, at 9:30 a.m.

The notice of meeting and proxy form are being mailed with this report to all shareholders of record.

Cover: A partial view of the Cochrane plant prior to expansion.



A representation of an ethane molecule (C_2H_6)

One of the scale models of a portion of the ethane extraction addition to the Cochrane plant. The several models are used during construction to optimize equipment arrangement and facilitate the construction schedule to eliminate conflicts relating to equipment setting. The models also allow the possible elimination of maintenance access problems and improve the accuracy of shop fabricated piping.

To our Shareholders

Financial

The Company's net income for 1977 was $5,787,000 or $4.85 per common share outstanding. The comparable net income for 1976 was $5,701,000 or $4.78 per common share.

Although the production level was somewhat lower at the Cochrane extraction plant than in 1976, higher product prices allowed the extraction operations to continue to make a substantial contribution to earnings in 1977.

As permitted by the Anti-Inflation Guidelines, the dividend rate on the Company's common shares was increased approximately 6% to an annual rate of $1.72 per share, effective with the December 30, 1977 dividend payment.

Gas Pipeline and System Operations

Gas deliveries during 1977 for export at the international boundary at Kingsgate, British Columbia for Alberta and Southern Gas Co. Ltd. and Westcoast Transmission Company Limited averaged 1,205 million cubic feet per day. This compares with 1,203 million cubic feet per day in 1976. Deliveries of gas for distribution in the East Kootenay area of British Columbia averaged 16 million cubic feet per day in 1977. In addition, an average of 20 million cubic feet per day was delivered to Westcoast at the East Kootenay exchange meter station near Yahk, British Columbia under the best efforts sales agreement between Alberta and Southern and Westcoast. This agreement assists Westcoast in making up its shortfall on contracted sales to Northwest Pipeline Corporation for distribution in the Pacific Northwest region of the United States.

Capital expenditures for minor additions and modifications to the pipeline during 1977 amounted to $110,000.

Proposed Expansion of the Pipeline System

During 1977, lengthy hearings dealing with proposals to transport Arctic gas reserves to southern markets were concluded in Canada and the United States. In Canada, the National Energy Board hearings to consider the application of Alberta Natural and the applications of Canadian Arctic Gas Pipeline Limited and the Alaska Highway — Foothills Groups were concluded in May, 1977. On July 4, 1977, the Board recommended certification, subject to certain conditions, for the pipeline sections in Canada, of the Alcan-Foothills (Yukon) Group project, while denying the Canadian Arctic Gas application. On August 1, 1977, the Lysyk Inquiry concluded that the social and economic consequences of the Foothills (Yukon) pipeline in the Yukon Territories were acceptable under certain conditions, including a delay in construction until 1981. Subsequently, the Canadian Government announced that a northern pipeline passing through the southern Yukon to provide for transportation of Alaskan gas to the lower 48 states, and ultimately of Mackenzie Delta gas to southern Canada, was in the national interest.

In the United States, the Federal Power Commission submitted its recommendation to the President on May 2, 1977. The Commission supported an overland pipeline system through Canada, if Canada would make the route available on acceptable terms and conditions.

Following negotiations between Canadian and United States officials, the Prime Minister of Canada and the President of the United States jointly announced, on September 8, 1977, that the Alcan-Foothills (Yukon) Group project had been selected and that the President would recommend its approval to the United States Congress. Approval by Congress followed in November, 1977. Before final certificates are issued in Canada, the project must have legislative ratification by Parliament and a bill has been introduced for this purpose. Thereafter, financing plans, gas purchase, sales and transportation contracts and construction plans and schedules must be finalized and approved.

In its Decision, the National Energy Board recommended to the Governor in Council that Alberta Natural be accorded the right to file an amendment to its application to provide for ownership of the southeastern British Columbia section of the pipeline by a company of which 51% of voting shares would be held by Foothills Pipe Lines (Yukon) Ltd., and 49% by Alberta Natural and the Company has so amended its application. For this purpose, a company was incorporated under the laws of Canada, having the name Foothills Pipe Lines (South B.C.) Ltd. Your Company has undertaken to subscribe for 49% of the shares to be issued by that company.

The application for facilities required in southeastern British Columbia was based on a pipeline design to transport an average daily volume of approximately 690 million cubic feet. This figure represents the minimum volume of gas that is expected to become available to California purchasers from volumes of gas to be produced in the State of Alaska. Contracts with Foothills Pipe Lines (South B.C.) Ltd., in respect of construction management and operation of this section of the pipeline will be negotiated by your Company.

Liquids Extraction Operations

Liquids production at the Cochrane extraction plant averaged 11,600 barrels per day during 1977, compared with 12,700 barrels per day during 1976.

The decline is mainly attributable to a reduction in the propane content of the gas entering the plant. The reduced propane content results from increased extraction activity by the owners of the gas before it enters the main transmission system.

In honor of the Cochrane plant's safety record of six consecutive years without a lost-time accident, operating personnel received a first place award from the Canadian Natural Gas Processors' Association.

Expansion of the Liquids Extraction Plant

In June, 1977, an ethane supply agreement was concluded with The Alberta Gas Ethylene Company Ltd. whereby Alberta Natural would expand the Cochrane plant to permit the sale to Alberta Gas Ethylene of ethane to be extracted from the gas stream. The existing plant is being modified and a turbo expander facility added to produce an estimated 24,000 barrels per day of ethane and will provide for a modest increase in the production of propane and heavier hydrocarbons. The estimated cost of the expansion is $50 million. Under the ethane supply agreement, the ethane will be sold on a cost of service basis which will provide full recovery of all operating costs, including depreciation and income taxes, and a return on the unrecovered investment in new facilities.

The ethane to be produced at the expanded Cochrane plant as well as ethane from other plants located in the Province will be used, in part, as feedstock for the manufacture of ethylene at a world scale plant being constructed by Alberta Gas Ethylene near Red Deer, Alberta. Alberta Gas Ethylene will sell the ethylene, also on a cost of service basis, to Dow Chemical of Canada, Limited, thus supplying an Alberta-based petrochemical industry. Ethane in excess of the requirements of the ethylene plant will be transported east through the Cochin Pipeline for export to the United States.

Contemporaneously with the signing of the ethane supply agreement, Alberta Natural executed a contract with Alberta and Southern for the sole and exclusive right to extract ethane contained in the natural gas stream passing through the Cochrane plant.

A contract which provides for the detailed engineering design and construction of the facilities required for the expansion at Cochrane has been entered into with Fish International Canada Limited. At the end of 1977, the installation of approximately 90% of the underground piping was completed and work had commenced on the above ground piping which forms a significant part of the construction program. Several major equipment items, including three large process towers, have been set on their foundations. It is estimated that construction will be completed on schedule during the summer of 1978.

Personnel

The Board of Directors wish to thank the employees of Alberta Natural. Their abilities and efforts have again contributed to the results achieved by the Company.

FOR THE BOARD OF DIRECTORS

R A MacKimmie
Chairman of the Board

A J Scott
President and Chief Executive Officer

March 1, 1978

De-methanizer process tower being raised into position at the plant site. This stainless steel column is 111 feet in length, 8 feet in diameter and weighs 70 tons.

De-ethanizer process tower as seen on the railway siding upon its arrival near the plant site. The tower is 132 feet in length, 13 feet in diameter and weighs 185 tons.

Alberta Natural Gas Company Ltd

Statement of Income

for the year ended December 31, 1977
(with 1976 figures for comparison)

	1977	1976
OPERATING REVENUE (Note 1):		
Transportation of gas	$22,454,000	$20,818,000
Liquids extraction	29,933,000	26,499,000
Total operating revenue	52,387,000	47,317,000
OPERATING EXPENSES:		
Operating and maintenance	34,403,000	29,377,000
Administrative	1,446,000	1,236,000
Depreciation (Note 1)	3,354,000	3,365,000
Property taxes	1,116,000	1,070,000
Total operating expenses	40,319,000	35,048,000
OPERATING INCOME (Note 1)	12,068,000	12,269,000
OTHER INCOME (Note 2)	2,105,000	1,483,000
INCOME BEFORE INCOME DEDUCTIONS	14,173,000	13,752,000
INCOME DEDUCTIONS:		
Interest on long term debt	2,178,000	2,319,000
Interest on other debt	155,000	50,000
Other	49,000	49,000
Total income deductions	2,382,000	2,418,000
INCOME BEFORE INCOME TAXES	11,791,000	11,334,000
PROVISION FOR INCOME TAXES (Note 1)	6,004,000	5,633,000
NET INCOME FOR THE YEAR	$ 5,787,000	$ 5,701,000
EARNINGS PER COMMON SHARE	$4.85	$4.78

See accompanying notes

Alberta Natural Gas Company Ltd

Statement of Reinvested Earnings

for the year ended December 31, 1977
(with 1976 figures for comparison)

	1977	1976
BALANCE AT BEGINNING OF THE YEAR	**$15,287,000**	$11,411,000
NET INCOME FOR THE YEAR	**5,787,000**	5,701,000
	21,074,000	17,112,000
DIVIDENDS PAID ON COMMON SHARES	**1,962,000**	1,825,000
BALANCE AT END OF THE YEAR (Note 3)	**$19,112,000**	$15,287,000

Statement of Changes in Financial Position

for the year ended December 31, 1977
(with 1976 figures for comparison)

	1977	1976
FUNDS PROVIDED:		
Net income	**$ 5,787,000**	$ 5,701,000
Depreciation	**3,360,000**	3,365,000
Provision for income taxes	**6,004,000**	5,633,000
Other income deductions	**49,000**	49,000
Notes payable	**4,999,000**	—
Decrease (Increase) in working capital other than short term borrowings	**3,388,000**	(3,274,000)
TOTAL	**$23,587,000**	$11,474,000
FUNDS APPLIED:		
Net additions to plant, property and equipment	**$15,303,000**	$ 129,000
Reduction of long term debt	**2,373,000**	2,374,000
Income taxes paid or payable	**1,416,000**	4,314,000
Dividends	**1,962,000**	1,825,000
Gas Arctic-Northwest Project expenditures	**2,377,000**	2,390,000
Other deferred charges	**156,000**	442,000
TOTAL	**$23,587,000**	$11,474,000

See accompanying notes

Alberta Natural Gas Company Ltd

Balance Sheet

December 31, 1977
(with 1976 figures for comparison)

ASSETS	**1977**	**1976**
PLANT, PROPERTY & EQUIPMENT — at cost		
(Note 2)	**$90,503,000**	$75,213,000
Less accumulated depreciation (Note 1)	**31,341,000**	27,993,000
Net plant, property and equipment	**59,162,000**	47,220,000
CURRENT ASSETS:		
Cash and interest bearing deposits	**4,182,000**	10,315,000
Accounts receivable	**8,102,000**	7,493,000
Materials and supplies — at cost	**1,128,000**	1,090,000
Prepayments and other	**76,000**	40,000
Total current assets	**13,488,000**	18,938,000
DEFERRED CHARGES:		
Unamortized organization and capital stock expense	**124,000**	131,000
Unamortized debt expense	**549,000**	590,000
Gas Arctic-Northwest Project expenditures (Note 1)	**9,586,000**	7,209,000
Other	**598,000**	442,000
Total deferred charges	**10,857,000**	8,372,000
TOTAL	**$83,507,000**	$74,530,000

APPROVED BY THE BOARD:

Richard H Peterson Director

[signature] Director

See accompanying notes

SHAREHOLDERS' EQUITY AND LIABILITIES	1977	1976
SHAREHOLDERS' EQUITY (Note 3):		
Capital stock:		
Preferred shares:		
Authorized — 2,000,000 shares of $25 par value each		
Common shares:		
Authorized — 2,500,000 shares of $10 par value each		
Issued — 1,192,822 shares	**$11,928,000**	$11,928,000
Contributed surplus	**2,386,000**	2,386,000
Reinvested earnings	**19,112,000**	15,287,000
Total shareholders' equity	**33,426,000**	29,601,000
LONG TERM DEBT (Note 4)	**25,626,000**	27,999,000
DEFERRED INCOME TAXES (Note 1)	**14,118,000**	9,530,000
CURRENT LIABILITIES:		
Notes payable	**4,999,000**	—
Accounts payable	**3,184,000**	2,419,000
Income taxes payable (Note 1)	**—**	2,855,000
Interest accrued	**427,000**	417,000
Sinking fund instalments due within one year	**1,623,000**	1,605,000
Total current liabilities	**10,233,000**	7,296,000
CONTRIBUTIONS IN AID OF CONSTRUCTION	**104,000**	104,000
TOTAL	**$83,507,000**	$74,530,000

See accompanying notes

Notes to the Financial Statements

December 31, 1977

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES:

(A) **Operations:**

Alberta Natural owns and operates a 36-inch pipeline from a point near Coleman, Alberta to Kingsgate, on the British Columbia - Idaho border for the transportation of gas owned by Alberta and Southern Gas Co. Ltd. and Westcoast Transmission Company Limited. Alberta Natural also owns and operates a natural gas liquids extraction plant near Cochrane, Alberta, which removes propane and heavier liquid hydrocarbons from the gas stream of Alberta and Southern and which is now being expanded to permit the removal of ethane from the gas stream.

The gas transportation contract with the gas shippers and the liquids sale agreement and ethane supply agreement with the liquids buyers provide for the full recovery of all operating expenses, depreciation, property and income taxes, together with a return on the unrecovered investment. In addition, Alberta Natural is entitled to 25% of the cumulative net marketing profits arising from the sale of the propane and heavier hydrocarbons by the buyers, Dome Petroleum Limited and Amoco Canada Petroleum Company Ltd.

(B) **Depreciation:**

Gas transmission plant is being amortized at an annual rate equal to the proportion that the annual volume of throughput authorized for export by the shippers bears to the total volume remaining under the licences granted by the National Energy Board.

Depreciation on the portion of the extraction plant used for the removal of propane and heavier hydrocarbons is calculated at an annual rate of 2½% on a straight-line basis. The ethane extraction facility currently under construction will be depreciated at an initial rate of approximately 6¼%, decreasing to 1¼% after 15 years.

(C) **Gas Arctic:**

Alberta Natural is a member of the Gas Arctic-Northwest Project Study Group. The applications for permission to construct a large diameter gas pipeline from Alaska and the Mackenzie Delta to major Canadian and United States gas market areas, sponsored by that Group, were unsuccessful. The cost of Alberta Natural's participation in this project, including an allowance for funds advanced, amounted to $9,586,000 to December 31, 1977.

Alberta Natural has concluded an agreement with its related companies, Pacific Gas Transmission Company and Pacific Gas and Electric Company and with The Montana Power Company which provides that Alberta Natural will make contributions to the project on behalf of itself and these companies. To the extent that these contributions become irrecoverable, the parties will share such contributions, in which event Alberta Natural's share will be approximately 18.5%.

(D) **Income Taxes:**

It is Alberta Natural's practice to claim, for taxation purposes, capital cost allowances and other deductions at maximum rates permitted in accordance with the Income Tax Act.

Since the gas transportation contract and the liquids sale agreement provide for recovery of income taxes, as explained in (A) above, Alberta Natural makes provision in its accounts for such income taxes included in billings to its customers, as well as providing for income taxes on marketing and other profits included in revenues, to the extent that they are not recoverable. Since January 1, 1973 billings to the gas shippers have included an income tax component. Income taxes have not been included in billings to the liquids buyers.

While it has no effect on the net income of Alberta Natural, accumulated taxes deferred to December 31, 1977 amount to approximately $27.8 million of which a provision of $21.3 million has been recorded in the accounts. $7.2 Million of the taxes have been paid.

2. PLANT, PROPERTY AND EQUIPMENT:

	1977	1976
Gas Transmission Plant		
In Service	**$57,208,000**	$57,113,000
Under Construction	**9,000**	17,000
	57,217,000	57,130,000
Less: Accumulated Depreciation	**28,300,000**	25,398,000
Net Gas Transmission Plant	**28,917,000**	31,732,000
Natural Gas Liquids Extraction Plant		
In Service	**18,101,000**	18,075,000
Under Construction	**15,185,000**	8,000
	33,286,000	18,083,000
Less: Accumulated Depreciation	**3,041,000**	2,595,000
Net Natural Gas Liquids Extraction Plant	**30,245,000**	15,488,000
Net Plant, Property and Equipment	**$59,162,000**	$47,220,000

Extraction plant under construction includes an allowance of $489,000 for funds used during construction (1976 - Nil).

3. SHAREHOLDERS' EQUITY:

Restrictions on the payment of cash dividends under certain circumstances are contained in the Deed of Mortgage and Trust securing Alberta Natural's bonds. At December 31, 1977 $3,082,000 otherwise available for dividends was restricted in this manner. Payment of dividends in 1978 will be subject to the restrictions imposed by the anti-inflation controls on dividends.

4. LONG TERM DEBT:

First Mortgage Pipe Line Bonds:

	Year Issued	Maturity	1977	1976
5¾% Series A	1961	1986	**$ 9,239,000**	$10,326,000
8¾% Series B .... ($7,000,000 U.S.)	1969/1970	1991	**7,510,000**	8,046,000
8½% Series C	1971	1992	**10,500,000**	11,250,000
			27,249,000	29,622,000
Less sinking fund instalments due within one year			**1,623,000**	1,623,000
			$25,626,000	$27,999,000

The Series A Bonds are payable in United States dollars. As provided by the gas transportation contract, Alberta Natural is required to accept from the gas shippers in substitution for an equal number of Canadian dollars, the number of United States dollars required to make the annual principal and interest payments on the bonds. Accordingly, the principal amount of the Series A Bonds and associated interest expense are recorded in Alberta Natural's accounts on the basis of the two currencies being equal in value.

The Series B Bonds are payable in United States dollars. The principal amount of the Series B Bonds is recorded in Alberta Natural's accounts at the amount of Canadian funds received on conversion of United States funds received on issue.

Sinking fund requirements amount to approximately $2,337,000 [$1,587,000 (U.S.) and $750,000 (Cdn.)] in each of the years 1979 to 1982. The 1978 sinking fund requirement for the Series C Bonds has been provided for by the purchase and cancellation of $750,000 principal amount of such bonds and consequently the liability for sinking fund instalments due within one year has been reduced by this amount.

Substantially all of the properties of Alberta Natural are pledged under the Deed of Mortgage and Trust securing the bonds.

5. COMMITMENTS:

At December 31, 1977 the Company had entered into a construction contract relating to its extraction facilities aggregating approximately $36,000,000 of which $22,300,000 remained to be expended.

6. DIRECTORS AND OFFICERS:

At December 31, 1977 Alberta Natural had nine directors and nine officers. Three of the officers were also directors. Directors' fees of $17,400 were paid in 1977 (1976 $2,000) which represented the only remuneration received from Alberta Natural by the directors and officers. In respect of services rendered to it by some of its officers who are also officers of a related company, Alberta Natural pays a service charge to the related company.

Auditors' Report

To the Shareholders of
Alberta Natural Gas Company Ltd:

We have examined the balance sheet of Alberta Natural Gas Company Ltd as at December 31, 1977 and the statements of reinvested earnings, income 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, these financial statements present fairly the financial position of the company as at December 31, 1977 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.

Calgary, Alberta
January 27, 1978

DELOITTE, HASKINS & SELLS
Chartered Accountants

Five Year Review Comparative Highlights

	1977	1976	1975	1974	1973
Operating revenue ($000's)	52,387	47,317	41,063	30,940	23,853
Net income ($000's)	5,787	5,701	4,563	3,456	2,144
Earnings per outstanding common share ($) (1)	4.85	4.78	3.83	2.90	1.80
Annual dividend rate per common share ($)	1.72(2)	1.62	1.50	1.10	1.10
Dividend payout ratio (%)	33.9	32.0	36.6	38.0	58.4
Common equity					
— total ($000's)	33,426	29,601	25,725	22,832	20,688
— $ per share	28.02	24.82	21.57	19.14	17.34
Total gas plant at year end ($000's)					
— original cost	90,503	75,213	75,105	74,183	73,911
— depreciated cost	59,162	47,220	50,456	52,591	55,342
Construction expenditures ($000's)	15,318	271	946	314	357
Average daily volume of gas delivered (Mcf)	1,240,000	1,220,000	1,198,000	1,128,000	1,219,000
Maximum day volume of gas delivered (Mcf)	1,404,000	1,358,000	1,340,000	1,369,000	1,372,000
Average daily production of natural gas liquids (Bbls.)	11,600	12,700	13,900	13,300	15,500

Notes: (1) Based on 1,192,822 common shares outstanding.
(2) Dividend rate increased December, 1977.

Alberta Natural Gas Company Ltd