

Shell Canada 1977 Annual Report



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Unless the content indicates otherwise, the terms 'Shell', 'Shell Canada', 'Company', 'we', 'our' and 'its' are used interchangeably in this report to refer to Shell Canada Limited and its consolidated subsidiaries.

Shell Canada Limited and subsidiary companies
Highlights of the Year

Financial	1977	1976
Earnings	\$ 154,587,000	\$ 135,828,000
Earnings per Class "A" Common Share	1.54	1.36
Dividends paid on common shares	56,087,000	50,069,000
Dividends paid per Class "A" Common Share	0.56	0.50
Revenues	2,374,606,000	2,137,227,000
Funds from operations	295,411,000	228,811,000
Capital and exploration expenditures	378,979,000	223,159,000
Income taxes - current	41,700,000	86,200,000
Crown royalties	189,498,000	146,743,000
Long term debt at end of year	182,270,000	174,620,000
Shareholders' investment at end of year	1,229,604,000	1,130,983,000
Operating		
Crude oil and natural gas liquids produced - gross (barrels daily)	69,100	73,500
Natural gas produced and sold - gross (thousands of cubic feet daily)	630,900	590,300
Sulphur produced - gross (long tons daily)	3,217	2,976
Sulphur sales - own production (long tons daily)	2,339	2,178
Crude oil intake to distilling units (barrels daily)	267,100	281,700
Petroleum product sales (barrels daily)	252,000	273,100
Chemical sales (metric tons daily)	977	982

Report to the Shareholders

The year 1977 was one of the most active in the history of the petroleum industry, with industry responding to higher prices and exploration incentive programs by increasing investment in oil and natural gas exploration and development in Canada.

Shell Canada's 1977 expenditures for resource exploration and development programs totalled \$236 million, an increase of 69 per cent over the previous year. In oil and natural gas, the Company completed a record year of exploration and development drilling, concentrated in Alberta but also extending to British Columbia, Saskatchewan and Ontario. A total of 51 exploratory wells were drilled, resulting in 17 natural gas discoveries and three oil discoveries. Drilling is being continued to evaluate these discoveries and assess their impact on the Company's oil and gas reserves.

Increased natural gas sales were made possible with the completion of the expanded Company-operated Burnt Timber gas plant. At Waterton, additional liquefied petroleum gas facilities will be completed in 1978 to enhance recovery of ethane, propane, butane and condensate.

The Company has reactivated plans to develop an oil sands mining project in the Athabasca area of Alberta. A consortium of interested companies is to be formed to help finance and develop the venture. Pending formation of the consortium, Shell Canada will continue development activities, including discussions with governments regarding commercial terms and preparation of a revised project application for submission to the Alberta Energy Resources Conservation Board later in 1978. Meanwhile, together with Shell Explorer and the Alberta Oil Sands Technology and Research Authority, an in-situ field pilot plant is being developed in the Peace River area of Alberta to evaluate recovery technology for oil sands deposits too deep for open-pit mining.

The Company has received approval under the Foreign Investment Review

Act to acquire all of the outstanding shares of Crows Nest Industries Limited of British Columbia. Total cost of the acquisition is about \$64 million. Shell has acquired more than 97 per cent of the shares. This investment will give Shell an opportunity to develop, produce and market metallurgical and thermal coal.

1977 earnings Shell Canada's 1977 consolidated earnings were \$154.6 million or \$1.54 per Class "A" Common Share, an increase of 14 per cent over 1976 earnings of \$135.8 million or \$1.36 per share.

The improvement in 1977 earnings was due mainly to increased prices for natural gas, gas liquids and crude oil and higher sales volumes for natural gas. Earnings from oil products were lower than the previous year, primarily because of extremely competitive market conditions brought on by excess industry refining capacity, relatively slack economic conditions and the impact of conservation.

This year, revenues, earnings, and capital employed are being reported by major business operating segments. This information is intended to provide more detail about the role that each major segment plays in the total Company operation. Earnings in 1977 of \$118 million for the Resources segment were 25 per cent higher than in the previous year and in the Oil Products segment earnings of \$26 million declined 13 per cent. While profitability has deteriorated in Oil Products and will take some time to improve, the Company continues to increase its efficiency through cost control programs in this important operation and the rationalization of activities.

In 1977 total capital and exploration expenditures by Shell Canada were \$379 million, exceeding the previous record amount of \$223 million spent in 1976 by 70 per cent. The 1977 expenditures were 110 per cent of the funds generated from operations and to provide for expanded capital requirements, internally-generated funds were supple-

mented by additional long-term borrowing. In January 1978, the Company completed the sale to the Canadian public of a 25-year debenture issue totalling \$125 million.

The Company remains in a strong financial position and will continue to seek out and develop new investment opportunities. For 1978, total capital and exploration expenditures are expected to be about \$400 million, with some \$290 million being spent on resource exploration and development programs, including construction of facilities to increase production of natural gas and associated liquids in Alberta. The higher expenditure levels being achieved each year reflect your Company's continuing commitment to investing in profitable opportunities to increase Canada's supply of oil and natural gas and improve the Company's performance.

We are also maintaining a strong position in minerals exploration and coal activities. In addition, we are expanding our chemical manufacturing and sales base with the construction of major new facilities at Sarnia which commenced in 1976.

Energy and the economy To a large extent, the high level of activity in 1977 by Shell and the petroleum industry generally reflected an improved understanding with governments of the investment climate needed to develop Canadian oil and gas potential.

The announced two-year schedule for crude oil price increases (\$1 a barrel every six months) represented a commitment by governments to raise Canadian prices gradually towards international levels. Implementation of this policy supports more confident financial planning by the industry, and the producers' share of the price increases, though still small, will provide some of the additional funds required for resource exploration and production.

The continuing success of gas exploration in Alberta has resulted in a short-term surplus, which creates some immediate new energy supply alternatives. To

utilize the reserves in the best interests of Canada, consideration will have to be given to expanding gas markets in Eastern Canada, to accelerating deliveries on existing export gas contracts, and to authorizing additional exports to the U.S. with suitable protection for Canada's future requirements.

Canadians are concerned about the high unemployment and the state of the economy in general. The weakness in the economy reflects the low growth of domestic consumption and a decline in competitiveness of many of our traditional industries in world markets. Unutilized capacity and low profitability are factors which lead to a lack of confidence, constraints on new investment, and high unemployment. These problems will no doubt influence the future direction of Canada's industrial strategy.

Compared with most other industrial countries of the world, Canada has an advantage in its enormous potential sources of energy. Their development will be costly and take time but, with the increases in the cost of foreign sources of energy, it can be accomplished competitively. New domestic sources can be used to displace our growing oil imports, and by providing security of energy supply, can be a strong underpinning for Canada's economy.

Canada should, therefore, continue developing all of its energy potential, such as hydro and nuclear electricity, coal, conventional oil and gas, while at the same time pursuing energy conservation projects. Moreover, there are still large, relatively untapped sources of energy in the oil sands and heavy oil deposits of Western Canada. A more positive attitude by governments to developing these potential reserves has encouraged industry to reconsider development plans. The deposits represent a unique opportunity for Canada, not only to provide future security of oil supply, but also to provide new opportunities for employment, improvement in Canada's balance of payments, and new investment expenditures capable of stimulating the whole economy.

The challenge in 1978 and beyond is to maintain the momentum of recent efforts and achievements and to match the development opportunities to the objectives of governments with firm commitments and action to proceed

with major energy projects. While the industry must be prepared to understand the constraints within which governments operate, governments in turn must recognize the economic necessity of allowing industry profits commensurate with the huge risks associated with the massive projects being considered.

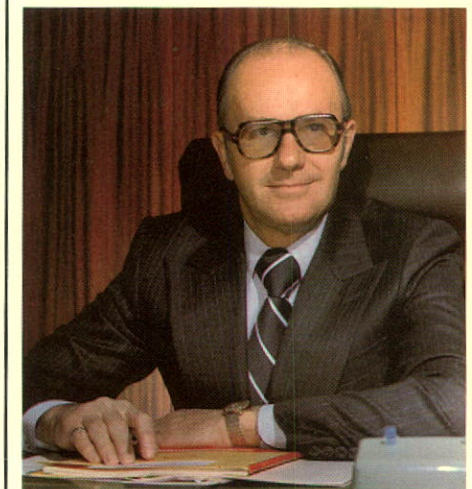
Shell Canada is a national Company, active in all major regions of the country. We recognize the diverse regional loyalties which exist throughout the breadth of this large country. We believe that it was the conviction that regional self-interest could best be served through accommodation and compromise which, in the final analysis, created a united Canada.

We must all continue our efforts to develop a better understanding of the problems that have created the present strains and divisions within Confederation. We believe that through a revitalized spirit of accommodation and the search for understanding between the regions of this country, Canada's problems can be resolved in the best interests of its people. From our standpoint, a strong, united country is in the best interests of our employees and shareholders.

Organization developments The growing complexity of political, social and economic pressures within Canada will continue to have a significant impact on Shell Canada. The changing values in society, the increase in government regulation, the growth of consumerism and other factors place new emphasis on how the Company plans and conducts its affairs.

To enable the Company to make a more effective response to this environment, three Senior Vice Presidents were appointed in April, 1977, to assist and support the President in developing the strategic directions and plans of the Company and in dealing with the external issues that could impinge on Shell's current and future performance.

As previously announced, Mr. D. de Bruyne was elected a Director of Shell Canada, succeeding Mr. G.A. Wagner who did not seek re-election at the Annual Meeting of Shareholders in April, 1977. Mr. Wagner had been a Director since 1971. Mr. de Bruyne is President of the Royal Dutch Petroleum Company and Vice Chairman of the Committee of



C. C. P. Pocock, Chairman of the Board of Directors (above)

C. William Daniel, President and Chief Executive Officer

Managing Directors of the Royal Dutch/Shell Group of Companies.

The achievements and success of your Company reflect the skills, initiative and dedication of its employees, dealers and agents. Their efforts in meeting the challenges during the last year are sincerely appreciated by management. On behalf of the Board,

C.C.P. Pocock, Chairman

C. William Daniel, President

Toronto, Ontario
March, 1978

Executive Changes*

The Senior Executive Three Senior Vice Presidents have been appointed in an organizational change designed to support and assist the President in the determination of corporate goals and investment opportunities, in scanning the external environment for developments that could affect the Company's current and future performance and for opportunities to participate with governments and other leading groups and institutions. Each Senior Vice President is also responsible for the general direction of designated functions within the Company. / Mr. J. M. MacLeod is Senior Vice President with responsibility for the Resources Functions. He had been Vice President (Exploration and Production) before his appointment April 1, 1977. / Mr. G. A. Bevan is Senior Vice President with responsibility for the Products Functions. He had been Vice President (Oil) from April 1, 1977, and was named Senior Vice President on December 1, 1977, to succeed Mr. P. Gordon, who retired from the Company after 37 years of service. / Mr. D. W. Menzel is Senior Vice President with responsibility for Staff Functions. He had been Vice President (Finance and Employee Relations) before his appointment April 1, 1977.



C. WILLIAM DANIEL



J.M. MacLEOD

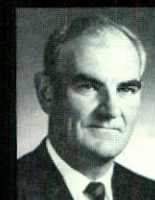


G.A. BEVAN



D.W. MENZEL

Secretary Mr. T. B. O. McKeag was appointed General Counsel and Secretary, effective April 29, 1977. He had been General Counsel, and assumed the responsibilities of the former Secretary, Mr. P. E. L. Legh-Jones, who retired after 31 years of service.



T.B.O. McKEAG

Resources Functions The Resources Functions are responsible for the Company's exploration and development activities for oil, natural gas, oil sands, coal and minerals. / Mr. J. E. Czaja, formerly General Manager, Production, was named Vice President (Development) and Mr. D. W. Smith, formerly General Manager, Exploration, was named Vice President (Exploration), both effective April 1, 1977.



J.E. CZAJA



D.W. SMITH

Products Functions The Products Functions are responsible for the manufacturing, supply, distribution and marketing of oil and chemical products. / Mr. L. F. J. Bolger, returning from an assignment with Shell International Petroleum Company and Shell International Chemical in the United Kingdom, was appointed Vice President (Chemicals), effective September 1, 1977, to succeed Mr. A. J. Foote who retired after 38 years of service.



L.F.J. BOLGER

Staff Functions The Staff Functions provide specialist support in the areas of employee relations, planning, public affairs, taxation, finance and administration. / Mr. J. N. Fiell, formerly General Manager, Administration, was appointed Vice President (Administration), effective April 1, 1977. / Mr. D. J. Taylor, Vice President (Corporate Planning and Public Affairs) from March 1, 1977, is to become Vice President (Oil) in the Products Functions, effective March 1, 1978.



J.N. FIELL



D.J. TAYLOR

* As of December 31, 1977

Financial Review

Shell Canada's 1977 earnings of \$154.6 million were 14 per cent higher than the \$135.8 million recorded in 1976. □ When related to the average capital employed in the Company's operations, earnings represented a return of 10.8 per cent, about the same as the previous year.

Segmented reporting To enable a better understanding of the Company's operations, the revenues, earnings and capital employed have been disclosed by major business segments. As shown in Table 1 on page 6, the over-all improvement in 1977 financial results is essentially the result of higher earnings in the Resources segment of the business, offset in part by a decline in Oil Products earnings.

In the Resources segment, 1977 earnings, at \$118 million, increased 25 per cent over the previous year. The improvement was mainly due to increased prices for natural gas, gas liquids and crude oil, and higher gas sales volumes; it was offset in part by higher royalties and operating expenses, increased exploration expense and reduced crude oil and natural gas

liquids production. The effective income tax rate on Resources income was lower than in 1976, reflecting additional depletion allowance earned by increased exploration and development expenditures.

Earnings in 1977 from the Oil Products segment of the Company's operations amounted to \$26 million, down 13 per cent from the previous year. Growth in demand for petroleum products was constrained by relatively slack economic conditions and by conservation measures. On the supply side product surpluses, reflecting excess industry refining capacity, resulted in continuing intense price competition which precluded the full recovery of higher operating costs. The severity of competition is perhaps best illustrated by the fact that if price levels permitted under the Anti-Inflation Board regulations had been realized, 1977 earnings from the Oil Products segment would have more than doubled.

Chemical Products earnings were \$5 million while earnings from other activities, such as investment income, amounted to \$14 million.

Taxes and royalties As shown in Chart 3, Shell Canada's 1977 tax and royalty payments to governments, including retail, excise and export taxes collected, amounted to \$737 million compared with \$774 million in 1976. The year-to-year decline reflected reductions in income taxes and crude oil export tax payments.

Income taxes were lower, mainly as a result of increased capital and exploration expenditures. In addition, the inventory allowance introduced by the federal government in 1977, to reduce the effects of inflation on taxable income, resulted in a tax saving of about \$4 million.

As a result of crude oil exchange agreements negotiated by Shell Canada with United States refiners in the latter part of 1976, no export tax payments were required on oil deliveries to the U.S. and no import compensation payments were made by the Canadian government on equivalent oil received from the U.S.

Despite the reduction in 1977 tax payments, combined taxes and royalties have doubled since 1973. Over the

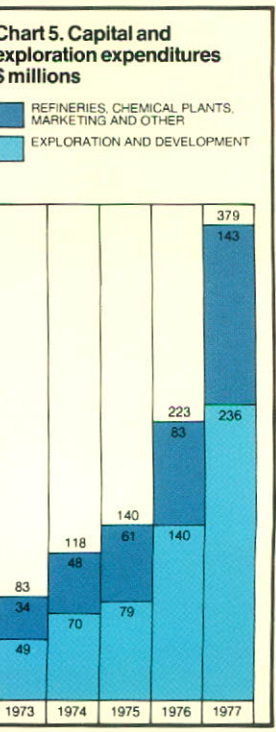
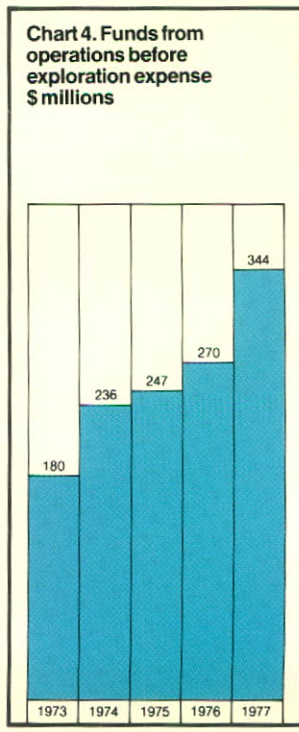
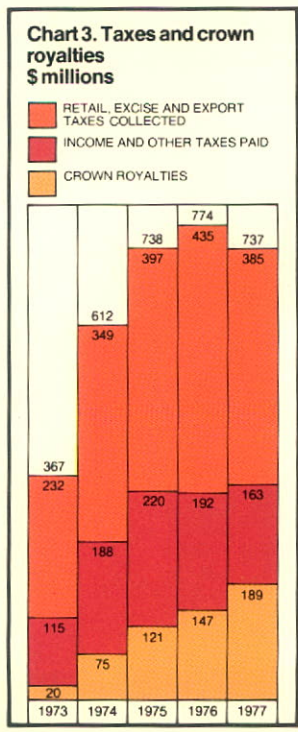
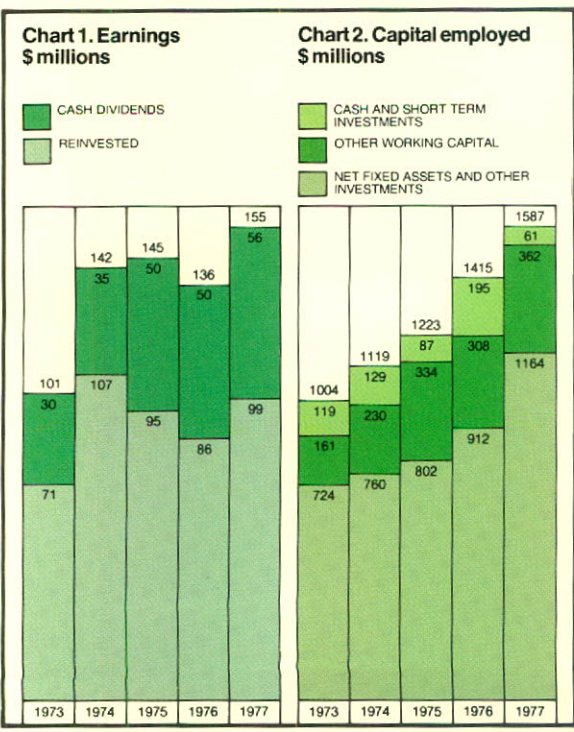


Table 1. Financial results by business segment—\$ millions

Segments	Revenues		Earnings (after tax)		Capital employed—Dec. 31	
	1977	1976	1977	1976	1977	1976
Resources	\$ 584	\$ 472	\$118	\$ 94	\$ 566	\$ 436
Oil products	1,691	1,585	26	30	769	683
Chemical products	113	97	5	4	202	71
Other	23	19	14	14	50	225
Interest on long-term debt	—	—	(8)	(6)	—	—
Inter-segment transfers	(36)	(36)	—	—	—	—
Total company	\$2,375	\$2,137	\$155	\$136	\$1,587	\$1,415

1. Financial data is reported as if the business segments were separate entities. Inter-segment transfers of products, which are included as revenues in the segment making the transfer, are eliminated from total Company revenues.

2. The Resources segment comprises exploration and development activities for crude oil, natural gas, gas liquids, sulphur, oil sands, coal and minerals.

3. The Oil and Chemical Products segments include the manufacture, distribution and marketing of refined oil products and chemical products respectively.

4. "Other" includes cash, short-term securities, pipeline investments and miscellaneous corporate ventures.

5. General corporate administrative costs are allocated to segments on a formula basis.

Table 2. Quarterly earnings—\$ millions

	1977	1976	1975
1st Quarter	\$ 38.8	\$ 32.7	\$ 36.1
2nd Quarter	38.4	32.5	34.2
3rd Quarter	32.3	31.7	41.3
4th Quarter	45.1	38.9	33.2
Total Year	\$154.6	\$135.8	\$144.8

same period the Company's earnings have increased by 52 per cent.

Funds from operations Funds from operations before exploration expense amounted to \$344 million in 1977, up \$74 million or 27 per cent over 1976.

Capital and exploration expenditures reached a record level of \$379 million in 1977, increasing by \$156 million or 70 per cent over the previous year. Exploration and development programs were up 69 per cent over 1976. The higher level of capital and exploration expenditures is largely attributable to the Company's extensive exploration efforts, to the development of natural gas reserves discovered in recent years, and to construction of the new chemical manufacturing facilities at Sarnia.

The rapid growth in Shell Canada's capital and exploration expenditures during the last five years has absorbed an increasing proportion of internally-generated funds. Charts 4 and 5 show

that while funds from operations have almost doubled since 1973, capital and exploration expenditures in 1977 were about 4½ times what they were in 1973 and amounted to 110 per cent of funds generated internally during the year.

In the Resources segment funds from operations in 1977 were about 2½ times the 1973 level, reflecting improved revenues for crude oil, natural gas and gas liquids as a result of rising prices. Shell Canada's 1977 exploration and development expenditures, however, were nearly five times as large as in 1973, amounting to 100 per cent of funds from operations.

Dividend payments in 1977 were \$56 million, a 36-per-cent payout of earnings. For 1976, dividends amounted to \$50 million or 37 per cent of earnings.

Working capital At 1977 year-end, working capital of \$422 million was \$80 million lower than at the previous year-end. Cash and short-term investments declined by \$135 million as a result of the Company's large-scale capital and exploration programs. Other working capital was up \$55 million, reflecting increased inventories and trade receivables.

Rising crude and product costs have resulted in a larger proportion of funds having to be invested in inventories and receivables in recent years. Chart 2

shows total capital employed by Shell Canada over the last five years and the types of assets in which this capital is employed. At the end of 1973, working capital exclusive of cash and short-term investments amounted to \$161 million and accounted for 16 per cent of total capital employed. By the end of 1977 it was \$362 million and 23 per cent of total capital.

Long-term debt At December 31, 1977, long-term debt outstanding amounted to \$182 million or 11 per cent of total capitalization.

On January 19, 1978, Shell Canada completed the sale to the Canadian public of a 25-year debenture issue in the amount of \$125 million at 9¾ per cent, priced at par. Proceeds of this issue, together with internally-generated cash, will be used for the Company's substantial capital and exploration programs and to satisfy working capital requirements. If the Company's capitalization at year-end 1977 was adjusted pro forma for this new debenture issue, long-term debt would amount to 18 per cent of total capital employed.

Inflation impact Inflation continues to erode the purchasing power of the dollar to a degree which undermines the usefulness of conventional financial statements. Such statements measure financial performance on an historical-cost basis, with no allowance for the increased costs of replacing inventories and capital facilities. While the need to account for the effects of inflation in financial reports is now widely recognized, no generally accepted method of inflation accounting has emerged from the various studies undertaken to date in Canada and other countries.

One method of adjusting financial data for the effects of inflation is general price-level accounting, which involves the restatement of historical-cost financial statements by application of a general price index. Shell Canada has been using this method to disclose the impact of inflation on its financial results since 1974. On this basis, earnings for 1977 would be \$83 million and the return on restated average capital employed would be four per cent. Additional details of this price level restatement are provided as supplementary information to Shell Canada's financial statements on page 29 of this report.

Resources Functions

Exploration and development investment of \$236 million or 100 per cent of cash flow was at record levels for Shell during 1977, with oil and natural gas programs under way in Alberta, Saskatchewan, British Columbia and Ontario. □ Resources earnings for 1977 were \$118 million compared with \$94 million in 1976. □ Planning was reactivated for an oil sands mining plant in the Athabasca area of Alberta. □ Exploration and development expenditures in 1978 are expected to be about \$290 million.

EXPLORATION

High activity In 1977, the Company had the most active year of oil and gas exploration in its history, with expenditures of \$109 million. Although the main centre of activity was Alberta, exploratory programs matured to the drilling stage in Saskatchewan, British Columbia and Ontario.

Western provinces Shell drilled 51 exploratory wells in 1977, 44 in Alberta and seven in Saskatchewan, resulting in 17 gas discoveries and three oil discoveries. Drilling is being continued to evaluate the discoveries and assess their full impact on the Company's oil and gas reserves.

Shell is establishing a position in the West Pembina area of Alberta, about 90 miles west of Edmonton, an area which has been the site of several industry discoveries. The Company has been successful in acquiring acreage at land sales and through a farm-in. By year-end, plans were completed to conduct seismic surveys and a joint-interest well was being drilled.

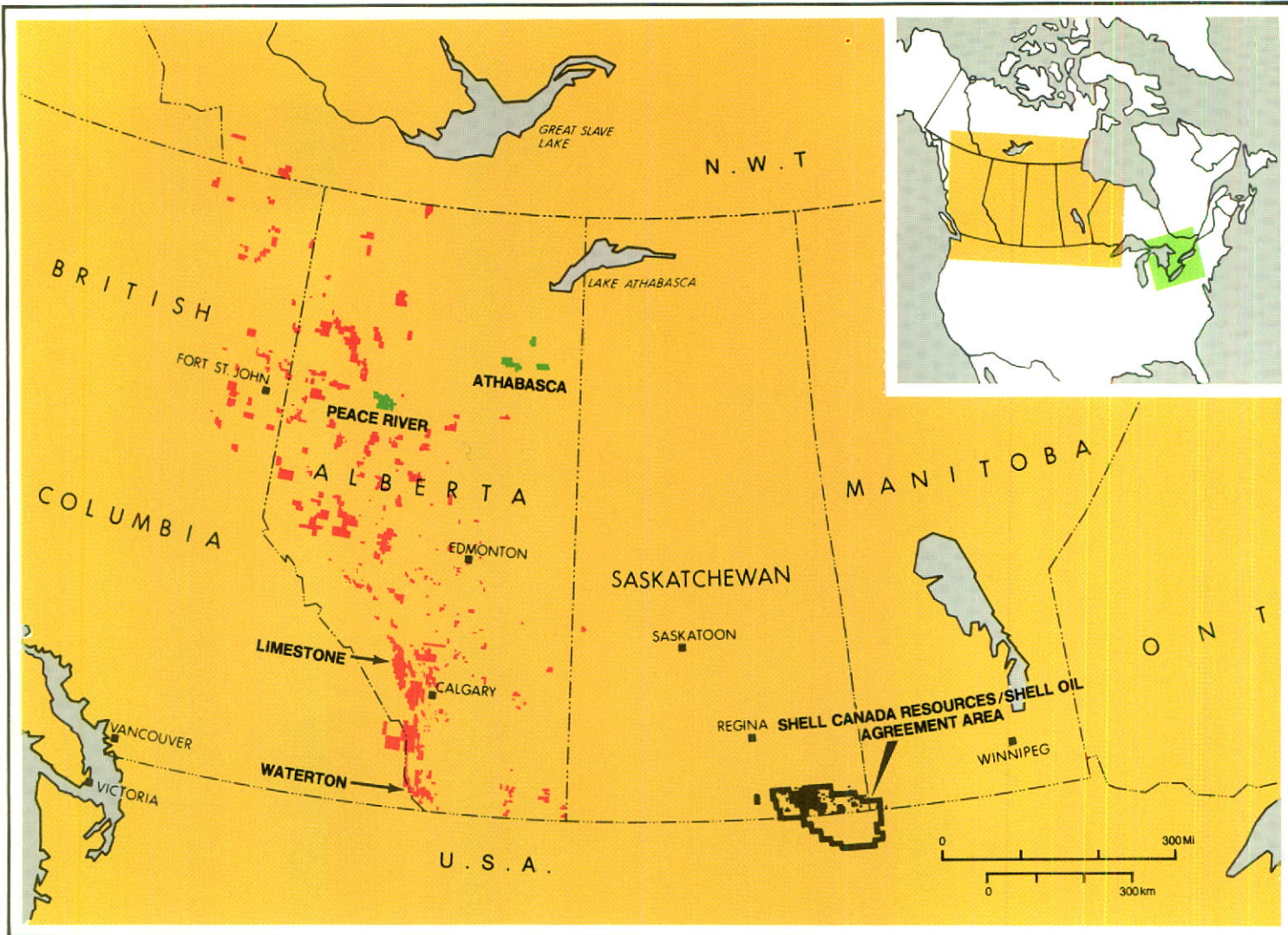
Shell Canada Resources is participating in the development of two oil discoveries by Shell Oil Company of Houston in North Dakota, and Shell Explorer, a wholly-owned subsidiary of Shell Oil, is participating in the development of a

Shell Canada Resources oil discovery at Torquay in Saskatchewan. The above wells were drilled under agreements with Shell Oil covering areas of mutual interest in southern Saskatchewan and North Dakota. Shell Canada Resources, by providing funds for development up to the amount incurred by Shell Oil on exploration, will earn 50 per cent of Shell Oil's interest in leases in an area surrounding discoveries on the agreement lands in North Dakota. Under similar terms, Shell Explorer will earn 50 per cent of Shell Canada Resources' interest in hydrocarbons in areas surrounding discoveries on the agreement lands in Saskatchewan. The agreement lands comprise a general area of about two million acres in each of North Dakota and southern Saskatchewan. The companies plan continuation of exploration programs in 1978.

In northeastern British Columbia, the Company acquired additional acreage



An exploratory natural gas well being drilled in Shell's Limestone field in the Alberta foothills northwest of Calgary.



at Crown sales in 1977 and conducted seismic surveys to support a drilling program. Two wells were being drilled at year-end and additional drilling is planned for 1978.

Ontario In southwestern Ontario, Shell continued geophysical work and initiated an exploratory drilling program late in 1977 which will continue in 1978. Shell Canada Resources now has oil and gas rights to more than 300,000 acres in the area, including more than 150,000 acres held by Canada-Cities Service Limited, which the Company will explore as part of an agreement with that firm.

Frontier regions Shell Canada Resources and Shell Explorer drilled one test during 1977 on their one-million-acre land holdings in the Mackenzie Delta region of the Northwest Territories. The test, Kumak E - 58 in the Niglintgak field, was completed as a successful gas well.

In the southern portion of Shell's land in the Delta, Petro-Canada has a drilling option on approximately a 900,000-acre block, the terms of which require Petro-Canada to decide in 1978 whether to drill additional exploratory wells.

Canadian Arctic Gas Pipeline Limited (CAGPL), a 15-company consortium (including Shell) which sought to construct and operate a pipeline to transport both Mackenzie Delta and Alaskan Prudhoe Bay gas to markets in Canada and the U.S., became inactive following government approval of an alternative scheme. Shell's share of the consortium's \$155 million expenditures, during its six years of active operation, was \$8 million. CAGPL's technical and environmental research has provided for the public record extensive knowledge relevant to pipeline planning for the northern areas.

Provision for possible construction of a connecting pipeline from the Macken-

Exploration and production areas at December 31, 1977

- SHELL CANADA RESOURCES LANDS
- SHELL CANADA RESOURCES/SHELL EXPLORER LANDS
- SHELL CANADA RESOURCES ONTARIO EXPLORATION AREA



zie Delta was a condition of the agreement between Canada and the U.S. establishing the principles for construction and operation of an Alaska Highway pipeline. The Canadian government has indicated this spur would be built when Mackenzie Delta gas supplies are required to meet Canada's energy needs.

The conceptual design of a plant to process Shell's proven Mackenzie Delta gas reserves of 900 billion cubic feet at Niglintgak has been completed. Development planning will be reactivated when the timing of a pipeline connection becomes apparent.

Under an amended agreement with Alberta and Southern Gas Company Limited of Calgary, a wholly-owned subsidiary of Pacific Gas and Electric Company, San Francisco, the Delta gas reserves of Shell Canada Resources and Shell Explorer were released for sale to buyers for consumption in Canadian markets. Alberta and Southern retains the right to purchase only gas which is not contracted for delivery to Canadian markets and which is authorized for export to Alberta and Southern's U.S. markets. In return, the Shell companies have started repayment of \$41 million in loans received from Alberta and Southern since the original agreement was signed in 1973. Of this amount, approximately \$2 million will be repaid by Shell Canada Resources.

On the Shell Canada Resources-Shell Explorer continental shelf holdings off Nova Scotia, Petro-Canada and a partner have fulfilled seismic and drilling farm-in obligations. The group drilled four wells and participated with Shell in a follow-up well, Penobscot B-41. This drilling did not result in the discovery of commercial quantities of hydrocarbons. Shell Canada Resources is continuing attempts to stimulate further drilling by farm-out. Petro-Canada has a drilling option in this area, the terms of which require a decision in 1978 whether to drill additional exploratory wells.

Under another farm-out agreement, Texaco Canada Limited and partners are proceeding with seismic evaluation of Shell's deep-water Gander block 200 miles east of Newfoundland and have begun extensive environmental studies in preparation for drilling the initial commitment test, possibly in 1979.

Shell Explorer has now met the exploration commitment on frontier acreage

Chart 6. Crude oil and natural gas liquids produced – gross Thousands of barrels daily

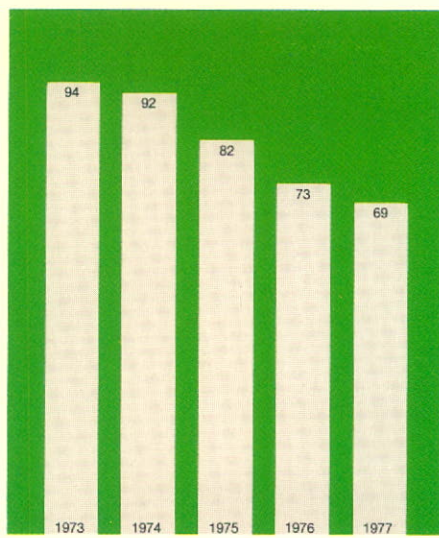
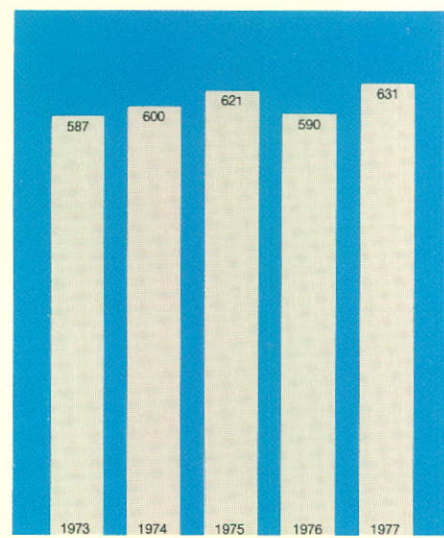


Chart 7. Natural gas produced and sold – gross Millions of cubic feet daily



A drill extension being positioned during seismic exploration work in the search for oil and natural gas in southwest Ontario.



A compressor station under construction in the Waterton natural gas field in Alberta. This station pumps gas to the Waterton plant and came on stream in 1978.

required under its joint-venture agreement with Shell Canada Resources and further exploration activity in these areas will be funded equally by the two companies.

As an extension of its exploration activities, Shell Canada Resources is utilizing surveying technology developed for its own offshore and onshore requirements to do contract jobs for both industry and governments in Canada and other countries.

Minerals The Company spent \$9 million on mineral exploration in 1977, about the same level as in 1976. Field programs were conducted in most of the provinces and in the Northwest and Yukon territories, with primary targets of copper, zinc, lead, tin and uranium.

Diamond drilling was continued in the Mackenzie Mountains of the Northwest Territories in an area where copper mineralization was encountered in 1976. Results of the program were not encouraging and some of the lands were surrendered.

Encouraging results have been obtained in a minerals exploration program in the Yarmouth area of Nova Scotia. The initial phase of the program, consisting of prospecting, airborne and ground geophysics, geological mapping, geochemical sampling and a 35-hole diamond drilling program, has been completed at a cost of about \$500,000. Results to date indicate tin, zinc and copper mineralization and additional work is planned to determine its economic significance. Shell's mineral land holdings in southwestern Nova

Table 3. Exploration and development expenditures—\$ millions

	1977	1976
Exploration		
Oil and gas	\$109	\$ 69
Minerals	9	8
	118	77
Development		
Oil and gas	115	60
Coal	3	3
	118	63
Total	\$236	\$140

Scotia total about 2,500 square miles.

Exploration work was continued for uranium under joint-venture agreements with Eldorado Nuclear Limited in Alberta and with Ontario Hydro in Labrador and the Northwest Territories. The Company also initiated a uranium exploration program in British Columbia.

DEVELOPMENT

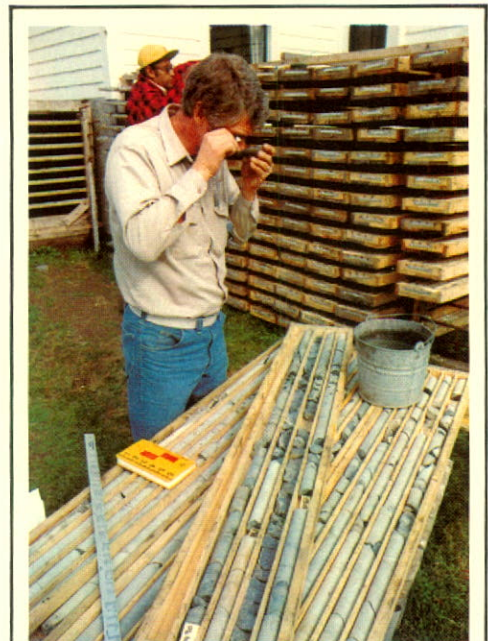
Investment The Company invested \$118 million in development programs during the year.

Oil and gas The Burnt Timber gas plant expansion came on stream in June, 1977, increasing Shell's share of capacity by 55 million cubic feet a day of sales gas. The Company and its partners have contracted to deliver gas in 1979 from the South Rosevear area, west of Edmonton, and a new gas plant to process a total of 40 million cubic feet a

day will be constructed to meet this schedule. Shell has a 50-per-cent share and will operate the plant.

Development drilling was continued in the Burnt Timber, North Burnt Timber and Willson Creek areas of the Alberta foothills northwest of Calgary. The North Burnt Timber, Willson Creek and Limestone Mountain areas have now been designated as the Limestone field. Gas from this field is contracted for delivery in late 1980, and processing plant planning is expected to be completed in early 1978.

A decision was made to include ethane recovery as part of the expanded liquefied petroleum gas (LPG) facilities under construction at the Company's Waterton gas plant. The expanded LPG plant, to cost \$33 million, will produce 5,400 barrels a day of ethane and 5,000 barrels a day of propane, butane and condensate. It is expected to be com-



Senior staff geologist Harry Hodge examines drill core samples at the mineral exploration site near Yarmouth, Nova Scotia.

pleted by late 1978. Also at Waterton, natural gas compression stations have been installed in the field to maintain gas deliverability to the plant.

Shell has committed \$18 million to acquire a five-per-cent interest in the Cochin joint-venture pipeline system. The system, operated by Dome Petroleum Limited, consists of a 12-inch pipeline which will run from Fort Saskatchewan, Alberta, through the U.S. midwest to Sarnia, Ontario, plus associated product storage and terminal facilities. Initially the line will carry ethylene, ethane and propane from Alberta to U.S. and Ontario markets. Operations are expected to commence in mid-1978.

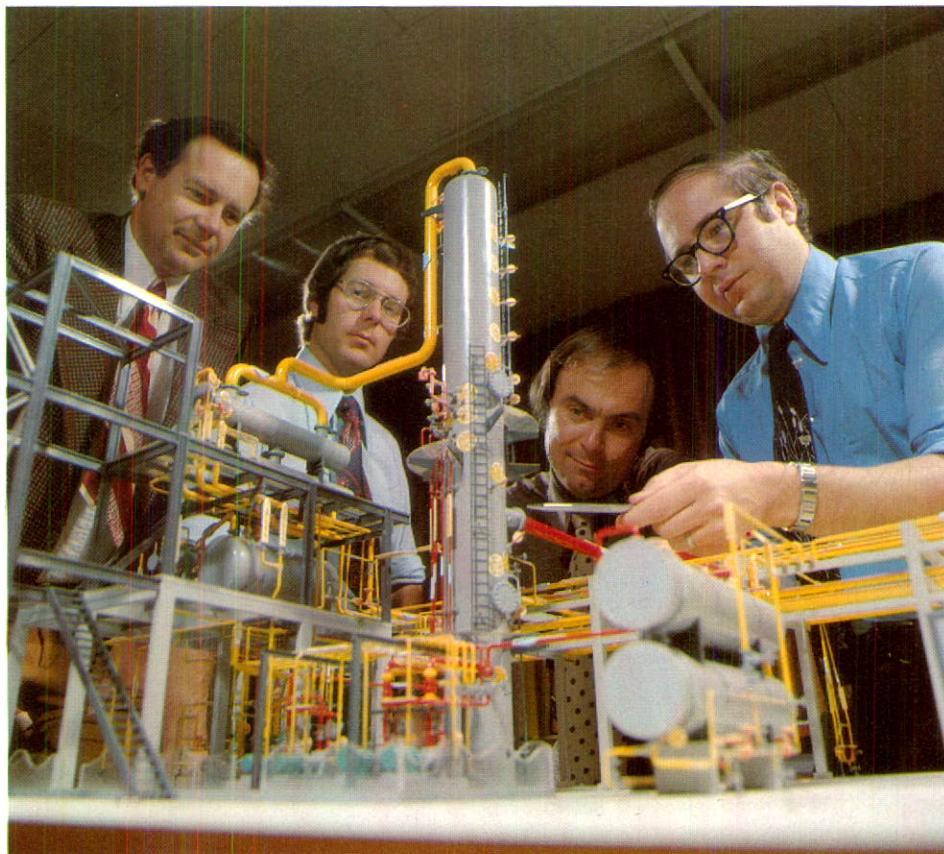
Oil sands Shell has reactivated efforts to develop an oil sands mining project involving one of its leases in the Athabasca area held jointly with Shell Explorer. Ten companies have expressed interest in joining the Company to form a consortium to resolve with governments the terms and conditions which will enable development to proceed. The proposed project, which would be capable of producing 125,000 barrels a day of synthetic crude oil, could be on stream by 1985. It would add an estimated one billion barrels of recoverable crude oil,



A sample of oil sand from Shell's Athabasca test pit showing the moist black inside and the grey outer crust which has dried with exposure to air. Inset shows the surface mining test pit.



An expansion program at the Shell-operated Burnt Timber gas plant doubled the capacity of the plant.



Engineering staff (l to r) Warren Hartt, Ralph Gorby, Jim Chambers and Derril Stephenson study a scale model of the in-situ oil sands pilot plant now under construction near Peace River, Alberta.

or 14 per cent, to Canada's currently producible reserves of conventional crude oil and natural gas liquids.

Shell Canada Resources, Shell Explorer and the Alberta Oil Sands Technology and Research Authority (AOSTRA) are proceeding to conduct a joint field pilot project to evaluate oil sands in-situ recovery technology. The test site, northeast of the town of Peace River, Alberta, will incorporate a new process developed by Shell involving steam injection at the base of the oil sands deposit. A pilot plant will be designed to recover up to a maximum of 3,500 barrels of bitumen a day. Construction of the plant and ancillary facilities, scheduled for completion in mid-1979, will cost \$58 million. Subsequent phases of the project will cover operations of the pilot for up to nine years. Total capital and operating costs over the life of the project could be as high as \$150 million. AOSTRA has a 50-per cent participating interest, Shell Canada Resources 25 per cent and Shell Explorer 25 per cent.

Coal The Company received approval under the Foreign Investment Review Act to acquire all of the outstanding shares of Crows Nest Industries Limited. Total cost of the acquisition is about \$64 million. As of March 3, 1978, Shell had acquired more than 97 per cent of the shares.

Crows Nest holds 87,000 acres of coal rights in southeastern British Columbia. This acquisition will give Shell the opportunity to develop, produce and market metallurgical and thermal coal. Crows Nest is also engaged in forestry operations in B.C. and has minor oil and gas interests in Alberta.

As an integral part of planning for future development of its large reserves of thermal coal in Alberta, Shell conducted surface mining reclamation projects in 1977.

SHELL CENTRE

In the fall of 1977, Shell Canada Resources completed consolidation of its various offices in Calgary into a new downtown building called Shell Centre. Shell occupied 16 of the 34 floors in the building at year-end.

More than 1,000 employees involved in oil and gas exploration and development, oil sands, coal and minerals oper-



In October, 1977, Shell Canada Resources staff moved into the new, leased 34-storey Shell Centre in downtown Calgary.

Table 4. Land holdings (net)

Millions of acres at December 31, 1977

	Shell Canada —Shell Explorer joint venture	Shell Canada direct
Oil and Gas		
East coast offshore:		
Shelf / Slope off Nova Scotia	11.4	0.2
Other (including Gander, Baffin Bay, Davis Strait)	4.9	9.1
Gulf of St. Lawrence	—	0.8
Hudson Bay	—	1.5
Northwest and Yukon Territories:		
Mackenzie Delta	1.0	—
Other	3.0	0.2
West coast offshore	13.1	—
Plains and Foothills of Western Canada:		
Producing regions	—	4.4
Oil sands	0.4	—
Coal	—	0.7
Minerals	—	3.0
	33.8	19.9
Shell Canada's 50% interest in acreage under joint venture agreement with Shell Explorer		16.9
Shell Canada total, net		36.8

Table 5. Reserves

I. Estimated proved recoverable reserves (excl. probable reserves), before deducting royalties at December 31:

	1977			1976		
	Oil	Gas(1)	Sulphur	Oil	Gas(1)	Sulphur
	Million Bbls.	Trillion Cu. Ft.	Million Long Tons	Million Bbls.	Trillion Cu. Ft.	Million Long Tons
Beginning of year	365	5.3	29	385	4.9	26
Additions and revisions	28	(0.2)	(1)	7	0.6	4
Production/sales	(25)	(0.2)	(1)	(27)	(0.2)	(1)
End of year	368	4.9	27	365	5.3	29

II. Oil sands synthetic crude potential reserves: (2)

	1977	1976
Mining (Athabasca)	1.7 billion barrels	1.7 billion barrels
In-situ (Peace River and Athabasca)	3 to 5 billion barrels	3 to 5 billion barrels (3)

(1) Reserves delineated in the Mackenzie Delta are excluded.

(2) Represents the Company's interest in oil sands.

(3) Production of these reserves is dependent on development of viable recovery technology.

ations and computing and related service functions were brought together into the one location from four different downtown buildings.

VOLUMES AND PRICES

Marketed natural gas sales volumes in 1977 were up seven per cent from 1976, primarily due to production from the expanded Burnt Timber plant. Total liquids production was down six per cent, mainly as a result of a natural decline in production capability in older fields.

The government-administered average Alberta wellhead crude oil price was increased by 70 cents a barrel on January 1, 1977, and by an additional \$1 a barrel to \$10.75, effective July 1, 1977. The latter price increase was the first of

four \$1-a-barrel increases that governments propose to implement at six-month intervals.

Natural gas prices were also scheduled to increase, after a one-month lag, commencing with the July crude price increase. Subsequent to the February, 1978, gas price increase, governments will further review the relationship between natural gas and crude oil prices. At year-end the average Alberta natural gas wellhead price, including the effect of export gas price increases in January and September, was about \$1.45 per thousand cubic feet compared with \$1.07 at year-end 1976.

Approximately one-quarter of the oil and gas price increases flows to the Company after allowing for royalties and the taxation credits applicable to the

Company's current investment program.

Sulphur sales in 1977 were 854,000 long tons compared with 797,000 long tons in 1976. Sulphur remained in surplus supply with about 30 per cent of production being stockpiled. By year-end, world markets reflected increased demand and prices.

Products Functions

Excess refining capacity in the industry, combined with lower growth in market demand, resulted in intense price competition throughout 1977. □ Petroleum product sales volumes declined under pressure of slack economic conditions and conservation measures. □ Major progress was made on construction of world-scale chemical manufacturing plants at Sarnia, Ontario.

OIL PRODUCTS

Refining Although there was a surplus of refining capacity in the industry in 1977, Shell Canada was able to achieve a refinery utilization of 91 per cent of capacity. Capacity of Shell's six refineries was rated at 295,000 barrels a day.

Extensive secondary water treatment facilities were completed during the year at Montreal East refinery at a cost of \$22 million. A \$5 million expansion was also completed at Montreal East to increase production of lubricating oil base stocks and to improve waste heat recovery.

Operating practices at refineries and

plant locations were improved to achieve greater efficiency and eliminate energy losses. Specialized training was carried out using, in some cases, a Shell-designed computer simulator to teach heater firing principles to operators. A \$1.6 million air pre-heater installation was begun on a large process heater at Montreal East refinery. At St. Boniface refinery, a \$140,000 heat recovery exchanger was installed.

At Sarnia refinery, a modern marine fuelling dock went into operation to service lake and deep-sea vessels operating on the Great Lakes. The dock is capable of handling some 1,100 vessels a year with improved efficiency and safety.

Supply and distribution The Company also upgraded its supply and distribution capabilities during 1977.

The automated distribution centre in Montreal became operational at mid-year, streamlining Shell's packaged goods distribution system throughout Eastern Canada by utilizing computer-directed stacker cranes and robot carriers to assemble packaged products for

shipment. It enables the Company to serve its motor oil, grease, tire, battery and automotive accessory markets more efficiently.

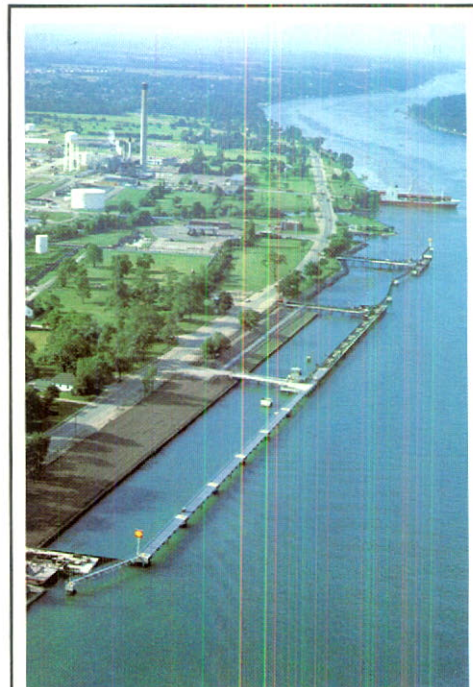
The capacity and versatility of Shell Canada's marine fleet was increased during the year with the purchase of a 65,000-barrel ice-strengthened Class 1 tanker, which has been named the Northern Shell. It replaces a smaller vessel and reduces the Company's requirement for more expensive chartered tonnage. Its design will permit extended use in the lower St. Lawrence waterway and the Eastern Arctic.

Marketing Shell Canada's revenues from oil products during 1977 increased by \$121 million but sales volumes averaged 252,000 barrels daily, a decline of eight per cent from the previous year. Earnings at \$26 million were down 13 per cent.

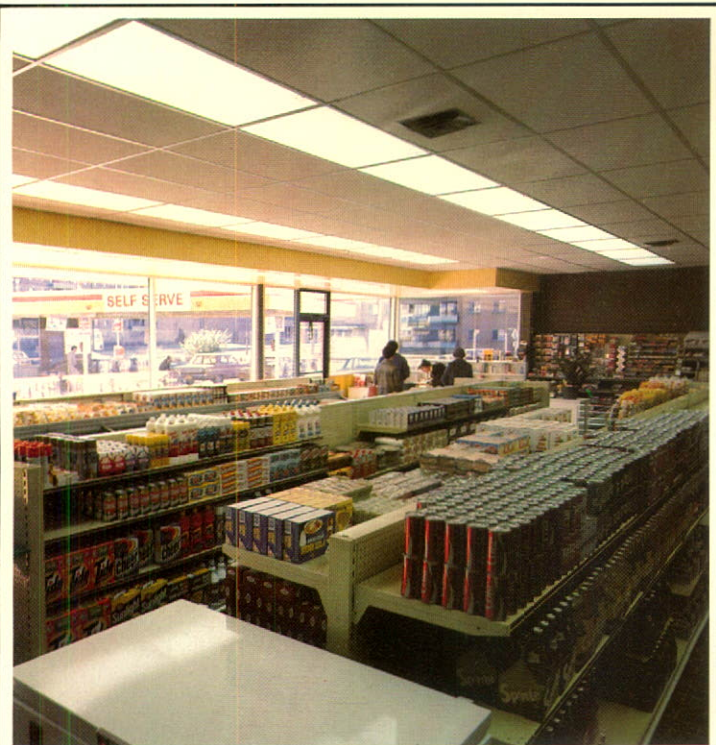
Sales decreased due to slack economic conditions and the impact of conservation. Moreover, gross margins on refined product sales remained low during the year and, in some market sectors, it was not economically attract-



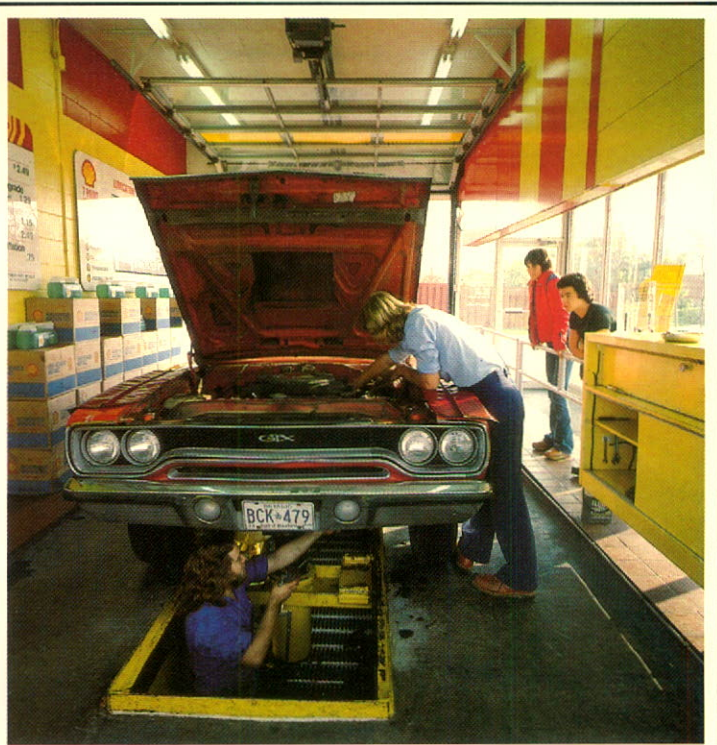
Part of the \$22 million effluent treatment plant at Montreal East refinery which went on stream in 1977.



The new fuelling dock at Sarnia refinery to service lake and deep-sea vessels.



The opening of this convenience food store, one of five in Winnipeg, was part of a national expansion program.



Shell Rapidlube (La lubritec in Quebec), a specialized fast lubrication service, has won strong consumer appeal.

ive for the Company to maintain previous sales levels. Excess refining capacity in the industry created product surpluses, downward pressure on margins and intense market competition.

Over the last five years Shell Canada has concentrated on a program of rationalizing and consolidating its network of retail service stations and improving the range of services offered to the Canadian motorist. As a result, the number of retail outlets has declined by 30 per cent from 1972 and the average gasoline throughput per location has increased by more than 70 per cent.

Besides providing more cost efficient service to customers, other objectives of this program include: Providing a mix of facilities that will satisfy the ever-changing and wide needs of consumers; improving the viability of remaining dealers by closing outlets that can no longer compete in an environment of rising costs and reduced margins; improving Shell's return on investment by redeploying capital in more profitable facilities.

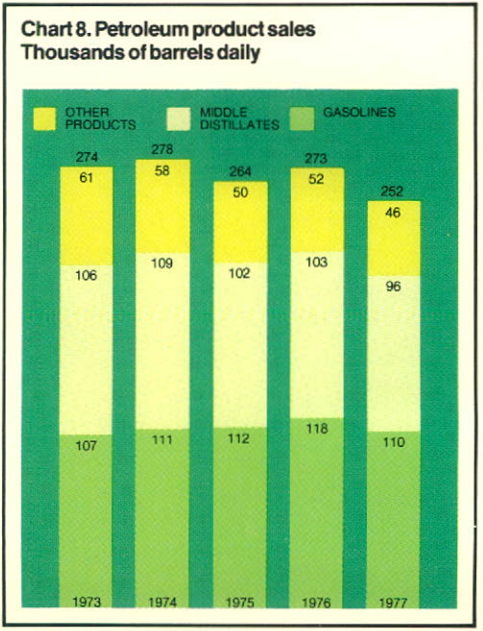
In new marketing developments, Shell Canada continued to expand its convenience food stores, a program begun in 1976. By the end of 1977 there were 37 convenience food stores either in operation or under construction across

Canada. Consumer acceptance has been excellent and, accordingly, the Company plans to have convenience food stores located in all major urban areas by 1980.

Plans also call for the establishment of a national network of fast oil change outlets called Shell Rapidlube (La lubritec in Quebec). Test results at experimental outlets in Toronto and Montreal have indicated a strong consumer appeal for this type of facility. The specialized oil change centres are designed to capture a larger share of the motor oil and lubricant market.

Table 6. Products capital expenditures – \$ millions

	1977	1976
Oil refineries	\$ 22	\$21
Marketing and other	23	25
Chemical plants	96	33
	\$141	\$79



Research Late in 1977, the Oakville Research Centre completed development of a new all-Canadian multi-purpose grease named Extrema* to meet the most demanding needs of industrial and automotive users. Extensive field test comparisons have shown that Extrema* is also superior to competitive products in high-temperature conditions and in terms of water resistance and long life. It is anticipated that it will contribute to future growth in the lubricants market.

* registered Shell Canada trade mark

Land and property During 1977, Shell Canada's land and property develop-



A 20-storey-high splitter tower arrives at Sarnia refinery where it was unloaded at specially designed riverside unloading facilities. The tower will separate propylene product in the polypropylene plant. (Right) A process tower being installed in the expanded aromatics plant at Sarnia.

ment department acquired additional land in Alberta for development into residential building lots. Work continued on subdividing, developing and servicing 80 acres of land acquired in Edmonton in 1974 and some residential lots have been sold to local builders.

CHEMICAL PRODUCTS

Sarnia expansion By year-end, construction of chemical plants at Sarnia, with a total capital cost of more than \$200 million, was well advanced and all major equipment deliveries were completed. On-site manpower totalled 1,395 and this is expected to peak at 1,750 by March, 1978. Delays of up to six months are anticipated in completing certain facilities and related construction costs will be higher than originally estimated, in the range of five to 10 per cent.

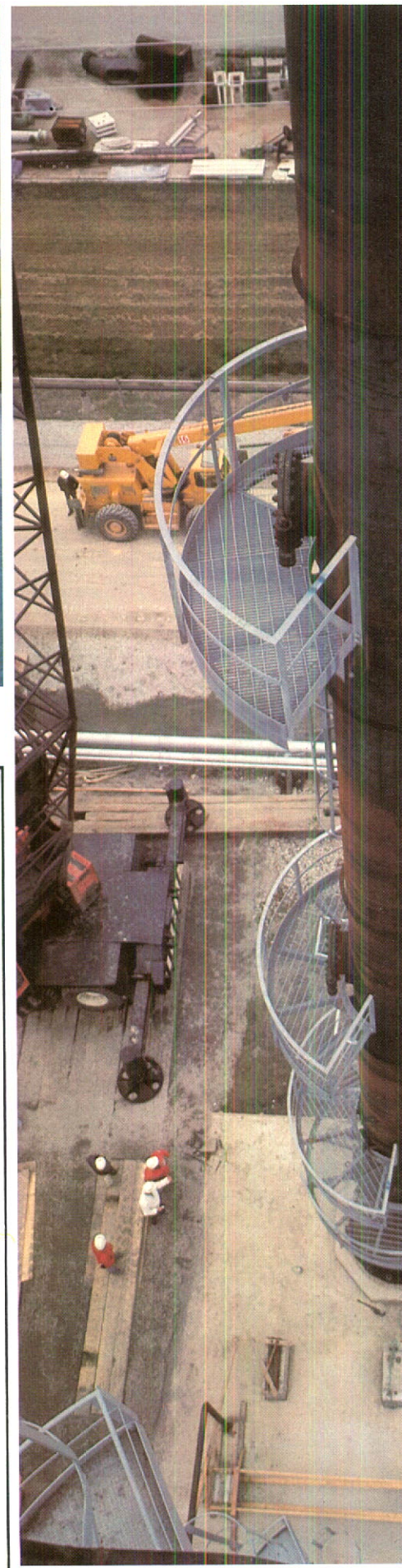
Construction of the polypropylene plant reached 40 per cent of completion

by year-end. Individual units in this complex processing plant will be completed and operationally tested sequentially, with mechanical completion of the final unit early in 1979.

The isopropyl alcohol (IPA) plant was 20-per-cent complete by the end of 1977. Final mechanical completion and startup is expected during the fourth quarter of 1978, after which a small obsolete IPA plant at Montreal will be phased out. Shell Canada is the sole producer of IPA in Canada.

Expansion of the aromatics (benzene, toluene, xylenes) plant, to double its capacity, was 55-per-cent complete by year-end. This project is expected to be operational in the second quarter of 1978.

The variety and sophistication of major equipment requirements have necessitated novel materials-handling and construction techniques. For example, through the use of special riverside





unloading and erecting facilities the tallest prefabricated distillation column ever handled in Canada was unloaded from a ship and subsequently erected, complete with insulation, ladders and platforms.

Appointment of key operating staff and their training was completed during 1977 and recruitment and training of other required manpower began in 1978. A total complement of approximately 150 persons will be required to operate and service the new plants.

Isopropyl alcohol will be supplied from Sarnia as feedstock for Montreal plants currently producing acetone and acetone derivatives (methyl isobutyl carbinol, methyl isobutyl ketone and hexylene glycol), widely used in the industrial chemical market. A \$7 million expansion of the Montreal facilities is under way.

Sales increase Chemical sales revenues in 1977 amounted to \$113 million, a 17-per-cent increase over 1976, and earnings rose \$1 million to \$5 million. Lower-than-anticipated worldwide market demand because of slower economic recovery and attendant surplus chemical manufacturing capacity resulted in continued pressures on prices and on profit margins.

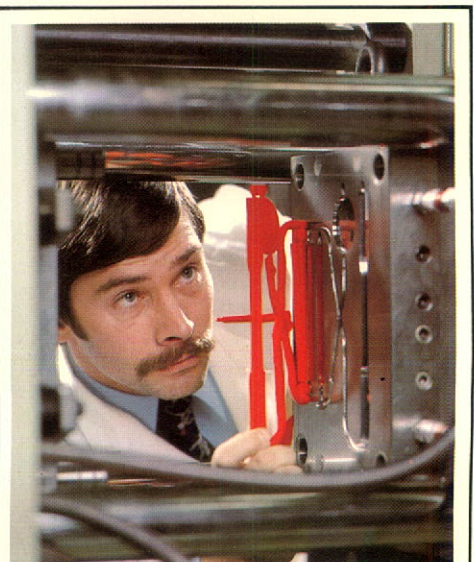
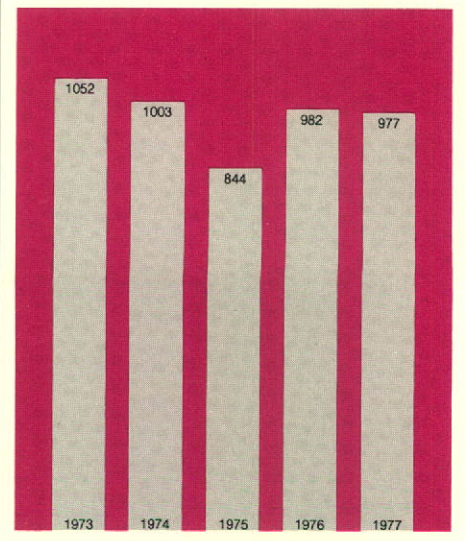
The use of Endaven*, Shell's wild oat herbicide for wheat and rapeseed in Western Canada, increased by more than 50 per cent in 1977. Mataven*, Shell's new registered wild oat herbicide for wheat with an even wider application timespan, was test-marketed in 1977 and it will be launched in a full marketing program as a companion product to Endaven* in 1978.

* registered Shell Canada trade mark

Research laboratory The new polymers (plastics) laboratory was officially opened at the Oakville Research Centre in August, 1977. It supports the Company's polypropylene business by providing technical assistance to customers on uses and applications of polypropylene and by undertaking product development research for Canadian market requirements.

Enviroglas In October, 1977, Enviroglas Limited, a wholly-owned subsidiary, began production in Belleville, Ontario, of fibreglass-reinforced plastic tanks to serve the market requirements for underground gasoline storage.

Chart 9. Chemical product sales metric tons daily



Technologist Dave Birkby tests a polypropylene specimen in the polymers laboratory at Oakville Research Centre.



(Top) The Company's audio-visual communication unit films the Shell Canada art collection at the Shell Centre in Calgary. From left: Peter Bradley, manager, audio-visual communication; sound recordist Ann McGaw and cameraman Harry Nuttall (not with Shell); Joe Mariash, manager, media communications; Ric Parker, manager, public affairs, Shell Canada Resources.

(Centre) A Shell grant enabled Acadia University in Wolfville, Nova Scotia, to buy this caravan (left) to use in its educational program for children with learning problems. At right, teacher Mary Cochrane holds a class for some of her students in the caravan.

(Bottom) President C. William Daniel addresses a Dialogue Day session for executives and employees at the Data Centre. This was one of several Dialogue Days held across the country.



Social Performance

Shell Canada continued to broaden various aspects of its social performance and, during 1977, formally integrated social performance planning with the business planning process. □ Social objectives and strategies for the Company include employee development, new staffing approaches, occupational health and safety, environmental protection and energy conservation. □ In its interface with society, the Company places emphasis on consumer relations, communications and community support.

Workplace developments Shell Canada is committed to individual employee growth and the fulfilment of work-related employee needs compatible with the achievement of profit objectives.

This is exemplified by the staffing concept to be applied at the new chemical manufacturing facilities in Sarnia. As a result of a study related to the quality of working life, a joint management-union task force is engaged in developing an organizational design to better meet the needs of today's workforce and improve productivity.

In this plant, employees will be trained in a variety of skills and provided with additional opportunities for growth. Under this style of management, involving a team approach rather than departmental divisions, emphasis is on increased responsibility and scope for decision-making for all employees.

Elsewhere, increased administrative productivity was obtained by improved staff utilization and the application of computing technology. A national computing network was extended and is providing lower costs, better customer service and greater job satisfaction for employees.

As part of the network, mini-computers have been installed in key field locations from Halifax to Victoria. This has afforded greater flexibility and responsiveness for employees and customers, thereby addressing the growing public alienation to remote, depersonalized systems. Shell Canada continues to be a leader in the progressive and

economic application of computer technology.

Implementation of the program, initiated in 1976, to make French the language of work in the Company's Quebec operations was continued during the year. In accordance with the Charter of the French Language, a Francization committee has been established with employee representatives from Eastern Marketing Region and the Montreal East refinery.

In keeping with increased public awareness of varying corporate standards of conduct, the Company formally issued to all employees guidelines concerning the business practices of Shell Canada. They reaffirm the objective of conducting the business of the Company and its subsidiaries consistent with the highest level of integrity and in full compliance with the law.

Health and safety During 1977, a corporate organization to co-ordinate the activities of occupational health and safety was created. This operation is being administered through a safety and industrial hygiene co-ordinator and a medical director.

Occupational medical resources and practices at each Company location continued to be reviewed in order to

establish co-ordinated health surveillance programs.

Safety programs received high priority, with emphasis on supervision, procedures, training, proper design and maintenance of equipment and facilities. Significant safety records were achieved at many locations. For example, St. Boniface and Oakville refineries had no lost-time injuries for some 1,000 calendar days and Waterton gas plant and Montreal East refinery each surpassed safety levels of one million man-hours.

Environmental activities Efforts continued through the year in all Company locations to strengthen environmental protection programs and improve energy conservation.

Shell, together with other companies in the industry and with government agencies, sponsored environmental research in such projects as identification of toxic substances of effluents and hydrocarbon emissions from service stations. Briefs were presented to governments covering revisions to legislation relating to the quality of water and air, auto emissions and underground storage tank regulations.

Energy conservation measures continued at Shell locations to improve



The use of computing technology continued to expand. Control clerk Willie Reimer and senior console operator Roger Shanks discuss processed information in the Data Centre computer room.

efficiency. Shell Canada's conservation achievements in 1977 saved up to the equivalent of 450,000 barrels of oil. This represents close to five per cent of the Company's 1972 base-year energy consumption.

Employee awareness of energy conservation was increased through programs initiated at Sarnia refinery using up-to-date videotape techniques. Shell also continued to be involved actively in conservation promotion through participation in government and association activities, public presentations and a consumer information service.

Communications initiatives A Marketing Communications department was established during 1977, combining Company activities in advertising and sales promotion with consumer research and consumer relations. A main task is to provide helpful and useful information to Canadian consumers.

Activities included distribution to credit card customers of a pamphlet entitled "Where your gasoline dollar goes; and how you can make it go further." A gasoline pump sticker program in Ontario and Manitoba is being extended across Canada to show the share of the motorists' dollar which goes to governments in taxes and royalties.

The objective of the consumer relations function is to ensure that Shell's operations are responsive to consumers' rights and expectations. These rights include being able to have a complaint heard, to receive honest information and safe, quality products, to have variety of choice and to receive fair value for money paid for products and services. Dialogue with consumer personnel in government, consumer associations and companies outside the industry will be given high priority.

Advice to industrial customers on the safe use of Shell products continued to be supplied through data sheets describing the properties and safe handling techniques of each product.

Shell also continued efforts to communicate effectively with the public on energy issues and Company operations. A program of media communications was maintained across the country.

Opportunities were pursued for Shell spokesmen to respond to issues of public concern, in interviews and speeches.

Written information and films continued to be supplied to schools, community organizations and individuals.

Shell Canada and the Canadian Broadcasting Corporation began co-production in 1977 of a series of 20 films for television and Shell's film library. Each episode will be a drama-

tized documentary of a Canadian who has excelled in his or her chosen field or has made a significant contribution to society. Telecasting of the series, to be called *The Winners*, is scheduled to commence early in 1979.

High priority was again given to internal communications through executive involvement in Dialogue Days with employees in various locations. Plant tours for employees and their families were organized in Montreal.

Community involvement Shell Canada's extensive participation in the community was maintained at the national, provincial and local levels.

Corporate contributions of \$1.8 million were made in 1977 to some 600 non-profit organizations. Health and welfare groups and education-related projects each received 33 per cent of the total. The other major classifications were culture, 23 per cent, and civic and community groups, seven per cent.

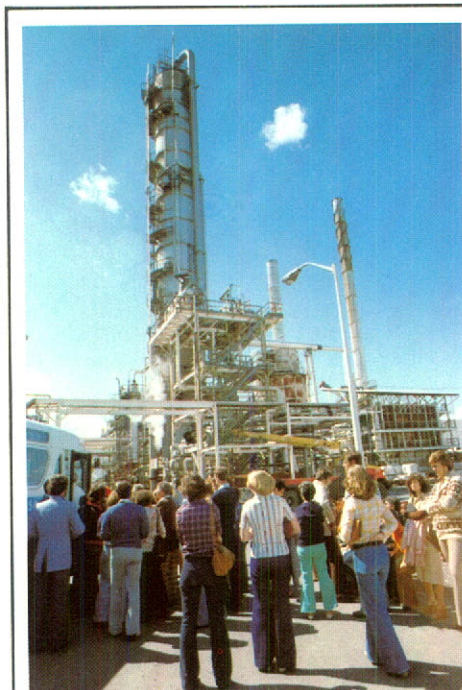
Support of the Canadian Ski Association competitions was continued through sponsorship of the Shell Cup, a series of events for senior national-level amateur competitors.

As an example of Shell's continued support of Canadian cultural development and as a means of enriching the working environment in the Shell Centre in Calgary, a collection of Canadian art has been acquired and is being displayed in the building. The paintings and sculptures have been selected by a committee of employees. Part of the collection will be on display in a permanent gallery open to the public. Smaller travelling exhibitions will be assembled for showing in various Canadian communities.

Many Shell employees take an active role as volunteers in their communities. Their efforts were assisted by the Company through some 50 grants amounting to a total of \$38,500 in 1977 to support projects in which employees are personally involved. These included sports equipment for inner-city youth centres, camp programs for underprivileged and handicapped children and instructional material for community medical training.



Formation of a Francization committee was part of a Shell program to make French the language of work in Quebec. Committee members in Montreal (l to r): Gilles Trudel, Jean-Paul Bodain, Gaston Girard, Gilles Bellefeuille, Roland Lapointe and Linda Gallant.



The families and friends of employees at Montreal East refinery visit the plant during a Family Day.

Financial and General

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Shell Canada Limited and subsidiary companies Accounting Policies

A summary of major accounting policies of Shell Canada Limited and its subsidiaries is presented below.

Principles of consolidation

The accounts of Shell Canada Limited and all its subsidiary companies are included in the consolidated financial statements.

Investments

Short term investments are carried at cost.

Investments in conventional oil and gas joint ventures are accounted for by the proportionate consolidation method. Investments in all other joint ventures are accounted for by the equity method.

Other long term investments are recorded at cost with provision made should there be a permanent decline in the value of such investments.

Inventories

Inventories of crude oil, products and merchandise are valued at the lower of current average cost and net realizable value. Current average cost is determined on a basis which approximates the "first-in, first-out" method.

Materials and supplies are valued at the lower of cost and estimated useful value.

Exploration and development costs

Exploration expense, including geological and geophysical costs, are charged to income currently. Leasehold acquisition costs, including drilling expenditures on exploratory dry holes which earned an interest in other operators' properties, are capitalized. All other drilling costs are initially regarded as capital expenditures. Exploratory wells are fully provided for out of income currently and, if successful, the provisions are reversed. Accumulated costs of development dry holes are written off against income in the year of completion.

All oil sands expenditures are initially capitalized, except pure research and indirect overhead costs which are expensed as incurred. Capitalized oil sands expenditures are fully provided for out of income currently unless a project is expected to commence production within a foreseeable period.

Depletion, depreciation, amortization

The cost of producing properties is depleted and tangible and intangible expenditures thereon, including gas plants, are depreciated or amortized on a unit of production basis over the estimated recoverable reserves. The costs of non-producing properties are amortized in accordance with experience. Oil sands expenditures will be depreciated or amortized on a unit of production basis once production commences. Other plant and equipment are depreciated on a straight-line basis over their estimated useful lives.

Maintenance, repairs and replacements

The costs of maintenance, repairs and replacements of plant and equipment are expensed in the year incurred except for replacements which appreciably increase the capacity or extend the useful service life of the facility. The cost of such replacements is capitalized and the replaced components are retired from the accounts.

Pensions

The Company has a retirement program which covers virtually all employees. All costs of the program are paid for by the Company except employees' Canada/Quebec Pension Plan contributions. The annual contribution to this program is calculated using an actuarial method which essentially spreads the cost of future benefits as a level percentage of payroll of active employees over their future years of service with the Company. The Company's policy is generally to fund retirement program costs accrued.

Income taxes

The Company follows the tax-allocation basis of accounting for income taxes. On this basis, a deferred income tax provision is recorded for the imputed tax effect of capital cost allowances and drilling and lease acquisition costs claimed for tax purposes in excess of depreciation, amortization and depletion charged against reported income.

Shell Canada Limited and subsidiary companies
Consolidated Statement of Earnings

Year ended	December 31, 1977	December 31, 1976
Revenues		
Sales and other operating revenue, net of direct retail taxes	\$2,349,295,000	\$2,111,185,000
Dividends, interest and other income	25,311,000	26,042,000
	2,374,606,000	2,137,227,000
Expenses		
Purchased crude oil, petroleum products and other merchandise (Note 3)	1,430,825,000	1,292,351,000
Operating expense	271,555,000	227,646,000
Selling and general expenses (Note 4)	270,911,000	254,447,000
Exploration expense	48,540,000	41,272,000
Depreciation, depletion, amortization and retirements, including dry holes written off (Note 5)	75,419,000	63,840,000
Interest on long term debt	15,069,000	10,643,000
Income taxes:		
–Current	41,700,000	86,200,000
–Deferred	66,000,000	25,000,000
	2,220,019,000	2,001,399,000
Earnings for the year	\$ 154,587,000	\$ 135,828,000
Earnings per Class "A" Common Share	\$1.54	\$1.36

Consolidated Statement of Earnings Retained in the Business

Year ended	December 31, 1977	December 31, 1976
Balance at beginning of year	\$ 624,059,000	\$ 538,340,000
Earnings for the year	154,587,000	135,828,000
	778,646,000	674,168,000
Dividends paid:		
–On 4% Cumulative Redeemable Preference Shares	40,000	40,000
–On Common Shares	56,087,000	50,069,000
Balance at end of year	\$ 722,519,000	\$ 624,059,000

Shell Canada Limited and subsidiary companies
Consolidated Statement of Financial Position

Assets	December 31, 1977	December 31, 1976
Current assets		
Cash (a)	\$ 36,612,000	\$ 161,458,000
Short term investments, at cost which approximates market (a)	23,955,000	33,883,000
Accounts receivable	365,759,000	323,421,000
Owing by affiliated companies	1,821,000	4,102,000
Inventories:		
–Crude oil, products and merchandise	376,600,000	263,547,000
–Materials and supplies	26,761,000	29,923,000
Prepaid rentals, insurance and other expenses	18,079,000	25,006,000
	849,587,000	841,340,000
Investments, long term receivables and other assets (Note 8)	69,010,000	56,490,000
Properties, plant and equipment (Note 5)	1,095,416,000	855,268,000
	\$2,014,013,000	\$1,753,098,000
Liabilities, deferred credits and shareholders' investment		
Current liabilities		
Accounts payable and accrued liabilities	\$ 337,433,000	\$ 280,694,000
Estimated income and other taxes	74,099,000	42,880,000
Owing to affiliated companies	13,285,000	11,524,000
Long term debt due within one year	2,322,000	3,397,000
	427,139,000	338,495,000
Long term debt (Note 10)	182,270,000	174,620,000
Deferred income taxes (Note 6)	175,000,000	109,000,000
Shareholders' investment		
Capital stock		
Preference Shares		
–4% Cumulative Shares, of the par value of \$10,000 each, redeemable at par:		
Authorized and issued - 100 shares	1,000,000	1,000,000
Common Shares (Note 7)		
–Class "A":		
Authorized - 86,572,887 shares of no par value		
Issued - 63,812,907 shares (1976 - 63,794,232 shares)	186,061,000	185,900,000
–Class "B":		
Authorized and issued - 9,087,039 shares of no par value	29,107,000	29,107,000
Contributed surplus	290,917,000	290,917,000
Earnings retained in the business	722,519,000	624,059,000
Total shareholders' investment	1,229,604,000	1,130,983,000
	\$2,014,013,000	\$1,753,098,000

(a) The 1976 figures have been reclassified to conform with December 31, 1977 presentation which now groups time deposits with cash instead of short term investments.

Approved by the Board, C. William Daniel, Director D. W. Menzel, Director

Shell Canada Limited and subsidiary companies
Consolidated Statement of Changes in Financial Position

Year ended	December 31, 1977	December 31, 1976
Source of funds		
Funds from operations (a)	\$295,411,000	\$228,811,000
Add: Exploration expense (b)	48,540,000	41,272,000
Funds from operations before exploration expense	343,951,000	270,083,000
Increase in long term debt	11,089,000	80,210,000
Capital stock issued	161,000	137,000
Proceeds from sales of capital assets and miscellaneous items	14,871,000	11,545,000
	370,072,000	361,975,000
Use of funds		
Capital expenditures:		
–Exploration and development	187,631,000	98,390,000
–Oil refineries and chemical plants	118,116,000	54,424,000
–Marketing and miscellaneous	24,692,000	29,073,000
Total capital expenditures	330,439,000	181,887,000
Exploration expense(b)	48,540,000	41,272,000
Total capital and exploration expenditures	378,979,000	223,159,000
Dividends paid on preference shares	40,000	40,000
Dividends paid on common shares	56,087,000	50,069,000
Decrease in long term debt	3,439,000	4,201,000
Net increase in investments, long term receivables and other assets	11,924,000	2,688,000
	450,469,000	280,157,000
Increase/(decrease) in working capital	(\$ 80,397,000)	\$ 81,818,000
Increase/(decrease) in working capital comprises:		
–Increase/(decrease) in cash and short term investments	(\$134,774,000)	\$108,382,000
–Increase/(decrease) in other working capital	54,377,000	(26,564,000)
	(\$ 80,397,000)	\$ 81,818,000

(a) Funds from operations comprise earnings plus provision for deferred income taxes, write-offs (depreciation, depletion, amortization and retirements, including dry holes written off), and other items not affecting working capital.

(b) Exploration expense includes oil sands and coal and minerals expense.

Shell Canada Limited and subsidiary companies

Notes to Consolidated Financial Statements

1. Accounting policies

A summary of major accounting policies of Shell Canada Limited and its subsidiaries is presented on page 22 of this report.

2. Subsidiary companies

Shell Canada Resources Limited is the only subsidiary company of operating significance. It is responsible for all oil, gas, oil sands, coal and mineral activities.

In view of the insignificance to shareholders of the other subsidiary companies, Shell Canada Limited has exercised its option not to comply with the requirement of Section 200 of the Companies Act of British Columbia that these be listed in the Annual Report.

3. Oil import compensation

The cost of purchased crude oil and petroleum products has been reduced by the Company's claims under the Canadian government Oil Import Compensation Program. A prerequisite for the payment of such claims is compliance with Canadian government price guidelines and domestic crude oil allocation programs.

4. Remuneration of directors and officers

Information relating to remuneration paid to directors and officers during the year 1977:

Number of directors (including past directors)	11
Aggregate remuneration as directors	\$72,000
Number of officers (including past officers)	29
Aggregate remuneration as officers and past officers	\$1,521,000
Number of officers (including past officers) who were also directors	5

The subsidiary companies paid no remuneration to their directors and officers during 1977.

5. Properties, plant and equipment

December 31, 1977 \$ thousands	Principal depreciation rates	Cost	Accumulated de- preciation, etc.	Net book value
Exploration and development	Unit of production	\$ 768,259	\$220,760 ⁽¹⁾	\$ 547,499
Oil refineries, chemical plants and tankers	4% to 10%	607,564	262,449	345,115
Marketing and miscellaneous facilities	4% to 13%	359,881	157,079	202,802
Total December 31, 1977		\$1,735,704	\$640,288	\$1,095,416
Total December 31, 1976		\$1,449,902	\$594,634	\$ 855,268

⁽¹⁾Accumulated depletion of producing leases included above amounted to \$36,564,000 at December 31, 1977, and \$34,911,000 at December 31, 1976.

6. Deferred income taxes

Deferred income taxes of \$175,000,000 at December 31, 1977, have been accumulated since January 1, 1968, the effective date of the recommendation of the Canadian Institute of Chartered Accountants concerning the tax-allocation basis of accounting for income taxes. If this basis of accounting had been adopted for years prior to 1968, the accumulated amount of deferred income taxes would have been increased by approximately \$53,000,000.

7. Capital stock

Class "A" Common Shares

The Company has an incentive Stock Option Plan authorizing the granting of options to officers and key employees to purchase authorized but unissued Class "A" Common Shares. The option price prior to May 27, 1977, is not less than 90% of the fair market value of the shares on the date the option was granted and after that date is fair market value and the term of each option is a maximum of 10 years.

At December 31, 1977, options to purchase an aggregate of 218,780 Class "A" Common Shares were outstanding at an average of \$12.12 per share, exercisable under the terms of the plan. 44,400 of these shares were optioned to the Company's officers. During the year, options for 18,675 shares were exercised at an average of \$8.62 per share for an aggregate cash consideration of \$160,918. Options for

54,775 shares were granted during 1977 at an average of \$13.54 per share.

Class "B" Common Shares

Holders of Class "B" Common Shares are entitled on a share-for-share basis to four times any amount paid or distributed by way of dividend or other distribution to the holders of Class "A" Common Shares.

8. Investments, long term receivables and other assets

\$ thousands	December 31, 1977	December 31, 1976
Investments in pipeline and other companies:		
At equity (with no quoted market value)	\$19,826	\$18,584
At cost less provision:		
—with quoted market value of \$14,046 (1976 - \$14,311)	9,399	9,395
—with no quoted market value	95	95
Long term receivables and other assets	39,690	28,416
	<u>\$69,010</u>	<u>\$56,490</u>

9. Commitments and contingent liabilities

At December 31, 1977, the Company and its subsidiaries had long term leases and other contractual commitments covering service stations, office space, and other facilities. During the next 12 months, the minimum amounts payable (without reduction for related rental income) under such commitments are estimated at \$17,798,000.

Shell Canada Limited might be required under certain conditions to make payments under guaranty and other contractual arrangements, of which the most significant is in connection with pipeline transportation of crude oil and refined products. The contingent liability under such arrangements will not exceed \$2,009,000 during the next 12 months and a total of \$6,006,000 subsequent thereto.

None of the companies had any commitments or contingent liabilities which, in the judgment of the management, would result in the sustaining of losses that would materially affect its financial position.

10. Long term debt

\$ thousands	Maturity	December 31, 1977	December 31, 1976
Shell Canada Limited:			
Sinking Fund Debentures—			
Series B—5 $\frac{7}{8}$ %	1977	\$ —	\$ 1,679
D—4 $\frac{3}{8}$ %	1978	340	567
F—5 $\frac{3}{4}$ %	1983	2,503	3,091
1—7 $\frac{1}{2}$ % (U.S. \$75,000)	1994	80,601	80,601
2—9 $\frac{1}{4}$ % (U.S. \$75,000)	1996	73,500	73,500
Promissory Notes—			
7% (£10,400)	1980 to 1984	19,065	7,977
5 $\frac{7}{8}$ % (U.S. \$2,070)	1981 and 1982	2,153	2,474
4% (U.S. \$726)	1990	755	755
Other long term obligations	varying dates	4,680	5,881
Shell Canada Resources Limited:			
Other long term obligations	varying dates	995	1,492
		<u>184,592</u>	<u>178,017</u>
Included in current liabilities as due within one year		2,322	3,397
		<u>\$182,270</u>	<u>\$174,620</u>

Of the foregoing long term debt, the aggregate amount of payments required to meet sinking fund or retirement provisions will be \$2,003,000 in 1979, \$10,521,000 in 1980, \$8,671,000 in 1981, and \$8,691,000 in 1982.

During 1975, Shell Canada Limited arranged a United Kingdom export credit loan in the form of 7% unsecured sterling promissory notes due 1980 to 1984, to assist in the financing of its new and expanded chemical manufacturing plants to be located at Sarnia, Ontario. Such promissory notes, which will not exceed a total amount of £11,200,000, will be issued from time to time up to December 31, 1979,

as funds are required.

The principal amounts of the U.S. Debentures and of the U.S. and Sterling Promissory Notes included in the consolidated financial statements are expressed in terms of Canadian dollars, translated at the rates of exchange prevailing when the funds were received. The aggregate principal amount, if translated at the rate of exchange prevailing at December 31, 1977 would have been \$189,393,000, compared with \$176,478,000 included in the financial statements.

11. Anti-inflation program

The Company is subject to and has complied with controls on prices, profits, compensation and dividends, under the federal government's Anti-Inflation Program.

12. Subsequent events

Long term debt

On January 19, 1978 the Company completed the sale to the Canadian public of a 25-year debenture issue totalling \$125 million at 9% per cent, priced at par.

Crows Nest Industries Limited acquisition

On March 3, 1978 Shell Canada Resources purchased more than 97 per cent of the outstanding shares of Crows Nest Industries Limited for about \$63 million. Assets of Crows Nest Industries include undeveloped coal reserves and a sawmill operation in British Columbia, and small producing oil and natural gas interests in Alberta.

The Oil Well Income Tax Act, 1978; Province of Saskatchewan

In November 1977, the Supreme Court of Canada set aside certain statutory provisions, regulations and orders relating to the imposition of the mineral income tax and royalty surcharge on oil production in Saskatchewan. To replace this method of taxation, the Government of Saskatchewan in January 1978 passed the Oil Well Income Tax Act with retroactive provisions to 1974. As the Regulations to the new Act have not yet been issued, the exact effect of the changes is not known at this time. However, it is believed that the amounts due under the new Act will not materially change the earnings of the years affected or the financial position of the Company.

Auditors' Report

To the Shareholders of Shell Canada Limited:

We have examined the consolidated statement of financial position of Shell Canada Limited as at December 31, 1977 and the consolidated statements of earnings, earnings retained in the business 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 consolidated 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.

We have also examined the supplementary information concerning inflation accounting appearing on page 29, which restates in summary form the earnings for the year ended December 31, 1977 in terms of the purchasing power of money at that date. In our opinion it has been properly prepared in accordance with the guideline, issued in December 1974 by the Canadian Institute of Chartered Accountants, for accounting for the effects of changes in the purchasing power of money.

Price Waterhouse & Co. Chartered Accountants, Toronto, Ontario,
March 3, 1978

Shell Canada Limited and subsidiary companies
Supplementary Information

Inflation accounting

The impact of inflation continues to focus attention on the limitations of financial statements prepared on the basis of historical cost. In December 1974, the Canadian Institute of Chartered Accountants issued a guideline for accounting for the effects of changes in the general purchasing power of money by restating historical cost financial statements using a single general price index. The index used is the Gross National Expenditure Implicit Price Index, published by Statistics Canada. The process of restating historical costs by this method does not introduce any factors other than general price-level changes and does not purport to represent replacement costs.

A summary of the major factors in the variance between earnings reported in the consolidated financial statements and those restated for changes in the general purchasing power of money, is contained in the following table:

Year ended December 31 (millions of dollars)	1977	1976
Earnings (This is the amount shown in the historical cost financial statements. At this point no inflationary effects have been recognized.)	\$ 155	\$ 136
Price-level adjustments		
Inventories (Additional charge based on restating the cost of inventories at the beginning and end of the year in dollars of current purchasing power, thus taking the inflationary gain out of the profit on the sale of inventories.)	(25)	(24)
Depreciation (Additional depreciation based on cost of fixed assets measured in terms of current purchasing power.)	(52)	(42)
General price-level loss (Net loss in purchasing power as a result of holding monetary items* during a period of inflation.)	(3)	(11)
Sales, purchases and all other expenses** (These items are increased by the change in the index between the average date at which they occurred and the end of the year.)	8	9
	(72)	(68)
	83	68
Adjustment required to update 1976 earnings, from 1976 dollars to 1977 dollars	-	6
Price-level restated earnings	\$ 83	\$ 74
- per Class "A" Common Share (These earnings restated in terms of the general purchasing power of money at the end of 1977. The inflationary effects have been identified and eliminated.)	\$0.82	\$0.74

* Monetary items comprise those assets and liabilities for which the amounts are fixed by contract or otherwise, regardless of changes in the general price level (for example, cash, receivables, current liabilities and long term debt).

** Income taxes are based on amounts recorded in the historical cost financial statements.

Shell Canada Limited and subsidiary companies
Statistical Review - Financial

Dollars in millions except per share amounts	1977	1976	1975	1974	1973
Revenues					
–Petroleum products	\$ 1,529.7	1,408.8	1,217.0	1,094.9	747.1
–Crude oil, natural gas and related products	\$ 661.0	565.8	541.6	391.6	252.5
–Chemical products	\$ 113.2	97.0	75.7	81.0	48.9
Other operating revenue	\$ 45.4	39.6	34.1	34.0	29.4
Net sales and other operating revenue	\$ 2,349.3	2,111.2	1,868.4	1,601.5	1,077.9
Dividends, interest and other income	\$ 25.3	26.0	16.7	22.1	15.0
Total revenues	\$ 2,374.6	2,137.2	1,885.1	1,623.6	1,092.9
Earnings and dividends					
Funds from operations	\$ 295.4	228.8	225.5	220.1	166.2
–per common share (1)	\$ 2.95	2.28	2.25	2.20	1.66
Earnings for the year	\$ 154.6	135.8	144.8	142.0	101.4
–per common share (1)	\$ 1.54	1.36	1.45	1.42	1.01
Dividends paid on common stock	\$ 56.1	50.1	50.1	35.0	30.0
–per common share (1)	\$ 0.56	0.50	0.50	0.35	0.30
Income taxes					
Current	\$ 41.7	86.2	126.5	113.5	49.5
Deferred	\$ 66.0	25.0	15.5	8.6	11.4
Financial position at year end					
Cash and short term investments	\$ 60.6	195.3	87.0	128.8	119.4
Other working capital	\$ 361.9	307.5	334.0	229.5	160.6
Investments, long term receivables and other assets	\$ 69.0	56.5	53.5	57.4	49.3
Properties, plant and equipment – net	\$ 1,095.4	855.3	748.8	702.9	674.9
Total capital employed	\$ 1,586.9	1,414.6	1,223.3	1,118.6	1,004.2
Long term debt	\$ 182.3	174.6	94.2	99.7	101.1
Deferred income taxes	\$ 175.0	109.0	84.0	68.5	59.9
Shareholders' investment at book value	\$ 1,229.6	1,131.0	1,045.1	950.4	843.2
Common shareholders' investment per common share (1)	\$ 12.27	11.28	10.43	9.48	8.41
Shareholders					
Common shares outstanding at year end (millions) (1)	100.2	100.1	100.1	100.1	100.1
Shareholders (number at year end)	17,458	17,761	18,186	18,406	17,484
Capital and exploration expenditures					
Capital expenditures (including all drilling)	\$ 330.4	181.9	119.2	102.1	69.3
Dry holes written off against income	\$ 18.6	9.1	2.3	2.5	1.0
Exploration expense (excluding dry hole write-offs) (2)	\$ 48.5	41.3	21.2	15.9	13.4
Employees					
Salaries, wages and employee benefits	\$ 176.9	157.5	139.5	113.3	95.2
Employees (number at year end)	6,972	6,812	6,725	6,686	6,570

(1) Class "A" Common Share equivalent, calculated on the basis that holders of Class "B" Common Shares are entitled on a share-for-share basis to four times any amount paid or distributed to holders of Class "A" Common Shares. Funds from operations and earnings per common share have been calculated using monthly weighted average Class "A" equivalent.

(2) Exploration expense includes oil sands and coal and minerals expense.

Shell Canada Limited and subsidiary companies
Statistical Review - Financial

	1977	1976	1975	1974	1973
Ratios					
Earnings before interest on long term debt, as % of average capital employed	10.8%	10.7%	12.7%	13.7%	10.9%
Earnings as % of average shareholders' equity	13.1%	12.5%	14.5%	15.9%	12.6%
Earnings as % of revenues	6.5%	6.4%	7.7%	8.7%	9.3%
Cash dividends as % of earnings	36.3%	36.9%	34.6%	24.7%	29.6%
Current assets to current liabilities	2.0	2.5	2.3	2.0	2.4
Long term debt as % of capital employed	11.5%	12.3%	7.7%	8.9%	10.1%
Capital employed per employee, in thousands of dollars	228	208	182	167	153

Statistical Review - Operating

Resources

Crude oil and natural gas liquids produced:					
—gross (thousands of barrels daily)	69	73	82	92	94
—net (thousands of barrels daily)	44	48	53	67	80
Net as % of total refinery intake	16%	17%	20%	24%	29%
Natural gas produced and sold:					
—gross (millions of cubic feet daily)	631	590	621	600	587
—net (millions of cubic feet daily)	431	410	449	483	522
Sulphur produced - gross (long tons daily)	3,217	2,976	3,074	2,955	2,682
Sulphur sales - own production (long tons daily)	2,339	2,178	1,967	2,396	1,651
Wells drilled (net): (1)					
Exploratory - oil	3	2	—	—	—
Exploratory - gas	17	9	4	2	—
Exploratory - dry holes	31	16	6	7	3
Development - total	25	16	11	9	15
Total wells drilled	76	43	21	18	18
Net acreage (millions)	37	36	37	50	64

Products

Rated refinery capacity at year end (thousands of barrels daily)	295	301	301	296	283
Crude oil intake to distilling units (thousands of barrels daily)	267	282	268	283	276
% of year end rated refinery capacity	91%	94%	89%	96%	98%
Petroleum product sales (thousands of barrels daily)	252	273	264	278	274
Chemical sales (metric tons daily)	977	982	844	1,003	1,052
Bulk distributing plants (number at year end)	687	658	669	685	755
Retail outlets (number at year end)	3,982	4,374	4,609	4,898	5,447

(1) Includes only those wells on which Shell Canada made direct expenditures. Under the joint venture agreement with Shell Explorer, Shell Canada has a 50 per cent interest in the following additional net wells drilled, for which all expenditures were charged to Shell Explorer as part of their exploration commitment:

1977 - 1 exploratory - dry; 1976 - 1 exploratory - dry, 1 development; 1975 - 1 exploratory - oil, 1 exploratory - gas, 1 exploratory - dry; 1974 - 1 exploratory - oil, 6 exploratory - dry; 1973 - 1 exploratory - oil, 1 exploratory - gas, 7 exploratory - dry.

Board of directors

C.C.P. Pocock, Chairman
Peter J.G. Bentley
C. William Daniel
Jacques de Billy
D. de Bruyne
A. Davidson Dunton
Philip Gordon
J.E. Hughes
D.W. Menzel
Louis Rasminsky

Officers

C.C.P. Pocock
Chairman of the Board,
London, England
C. William Daniel
President and Chief Executive Officer,
Toronto
G.A. Bevan
Senior Vice President (Products
Functions), Toronto
J.M. MacLeod
Senior Vice President (Resources
Functions), Toronto
D.W. Menzel
Senior Vice President (Staff
Functions), Toronto
L.F.J. Bolger
Vice President (Chemicals), Toronto
J.E. Czaja
Vice President (Development),
Calgary
J.N. Fiell
Vice President (Administration),
Toronto
D.W. Smith
Vice President (Exploration), Calgary
D.J. Taylor
Vice President (Corporate Planning
and Public Affairs), Toronto
T.B.O. McKeag
Secretary, Toronto
K.B. Munnoch
Treasurer, Toronto
R.F. Taylor
Controller, Toronto

December 31, 1977

Transfer agent and registrar

The Royal Trust Company—Halifax,
Montreal, Toronto, Winnipeg, Calgary,
Vancouver.

Notice of change of shareholder's ad-
dress should be sent to the transfer
agent.

Stock exchange listings

The Class "A" Common Shares of Shell
Canada Limited are listed on the Mon-
treal, Toronto and Vancouver Stock
Exchanges. Stock symbol is SHC.

**Valuation Day value of
Class "A" Common Shares**

For the purpose of calculating Canadian
income tax on capital gains, the value on
Valuation Day (December 22, 1971) of
a Class "A" Common Share of Shell
Canada Limited, as established by the
Department of National Revenue, was
Canadian \$37.25. This is equivalent to a
value of \$12.41 $\frac{2}{3}$ in relation to transac-
tions after the May 14, 1973 three-for-
one common share subdivision.

Annual meeting

Notices of the annual meeting of share-
holders of Shell Canada Limited, infor-
mation circulars and proxy forms will be
mailed to shareholders in the near
future.

On peut obtenir ce rapport en français
sur demande.

Voting rights

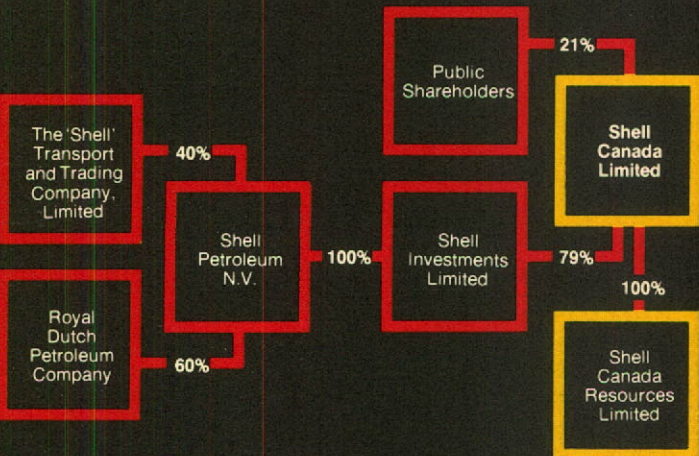
Approximately 71 per cent of the voting
rights in Shell Canada Limited are held
by companies of the Royal Dutch/Shell
Group of Companies and 29 per cent
are held by public shareholders.

Principal pipeline investments

At December 31, 1977	% Ownership
* Alberta Products Pipe Line Ltd.	10.0
Cochin Pipeline System	5.0
Interprovincial Pipe Line Limited	2.0
* Montreal Pipe Line Company Limited	16.0
* Peace Pipe Line Ltd.	12.8
* Sun-Canadian Pipe Line Company Limited	45.0
Trans Mountain Pipe Line Company Ltd.	8.6
* Trans-Northern Pipe Line Company	33.3

* Accounted for under the equity method.

Ownership of the Company at December 31, 1977





Shell Canada Limited

