

**Bow Valley Industries Ltd.**

Annual  
Report  
1970

## Bow Valley Industries Ltd. and Subsidiary Companies

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### Officers

DARYL K. SEAMAN, President  
BYRON J. SEAMAN, Senior Vice-President  
HENRY C. VAN RENSSELAER, Vice-President, Finance  
DONALD R. SEAMAN, Vice-President  
H. DONALD BINNEY, Vice-President  
ROBERT J. PHIBBS, Vice-President  
H. KEITH LAZELLE, C.A., Secretary-Treasurer

### Directors

FREDERIC J. AHERN, Vice-President, The United Corporation, New York, U.S.A.  
H. DONALD BINNEY, Vice-President, Bow Valley Industries Ltd., Calgary, Alberta  
WILLIAM A. HOWARD, Q.C., Barrister and Solicitor, Calgary, Alberta  
WILLIAM S. HULTON, C.A., The Mercantile Bank of Canada, Vancouver, B.C.  
DARYL K. SEAMAN, President, Bow Valley Industries Ltd., Calgary, Alberta  
BYRON J. SEAMAN, Senior Vice-President, Bow Valley Industries Ltd., Calgary, Alberta  
DONALD R. SEAMAN, Vice-President, Bow Valley Industries Ltd., Calgary, Alberta  
D'ALTON L. SINCLAIR, President, The Charterhouse Group Canada Limited, Toronto, Ontario  
HENRY C. VAN RENSSELAER, Vice-President, Finance, Bow Valley Industries Ltd., Calgary, Alberta

### Head Office

630 - 6th Avenue South West, Calgary, Alberta

### Transfer Agents

#### Common Stock

GUARANTY TRUST COMPANY OF CANADA, Calgary and Toronto  
THE BANK OF NEW YORK, New York, U.S.A.

#### Preferred Stock, Series A

THE ROYAL TRUST COMPANY, Calgary, Winnipeg, Toronto and Montreal

### Registrars

#### Common Stock

GUARANTY TRUST COMPANY OF CANADA, Calgary and Toronto  
SCHRODER TRUST COMPANY, New York, U.S.A.

#### Preferred Stock, Series A

GUARANTY TRUST COMPANY OF CANADA, Calgary, Winnipeg, Toronto and Montreal

### Auditors

PRICE WATERHOUSE & CO., Calgary, Alberta

### Legal Counsel

HOWARD, MOORE, DIXON, MACKIE & FORSYTH, Calgary, Alberta  
CRAVATH, SWAINE & MOORE, New York, U.S.A.

### Bankers

THE ROYAL BANK OF CANADA, Calgary, Alberta  
THE MERCANTILE BANK OF CANADA, Calgary, Alberta



Sedco Drilling vibrator unit conducting seismic work in northern British Columbia.

## HIGHLIGHTS

	1970	1969
Gross income . . . . .	\$44,139,209	\$34,253,364
Depreciation and depletion . . . . .	2,541,593	1,775,047
Net income . . . . .	2,365,488	1,803,791
Shares outstanding at year end . . . . .	3,249,342	3,185,112
Cash flow per common share * . . . . .	\$ 1.42	\$ 1.14
Net income per common share * . . . . .	\$ .55	\$ .55

\* Based on the average number of shares outstanding during the respective years (1970—3,233,243; 1969—3,111,956) and after dividend requirements on Series A Preferred Shares and Second Preference Shares.

## Annual General Meeting

The 1970 Annual General Meeting of the Shareholders of Bow Valley Industries Ltd. will be held at the offices of the Company at 10 a.m. September 24, 1970.

## PRESIDENT'S MESSAGE



Daryl K. Seaman, President.

I am pleased to report that while your company's reported earnings per share of 55¢ for the fiscal year ended May 31st, 1970 were unchanged from a year earlier, gross revenues, cash flow per share and operating earnings per share registered improvement over fiscal 1969 results. Furthermore, your company ended the fiscal year in excellent financial condition with working capital of \$8,195,147 of which \$6,344,919 was in the form of cash or deposit receipts.

During the fiscal year just ended Gross Income rose to \$44,139,209 from \$34,253,364 last year. Net Income in fiscal 1970 was entirely from operations and amounted to \$2,365,488 compared to Income Before Extraordinary Items of \$1,552,672 and Net Income of \$1,803,791 last year. Cash Flow in fiscal 1970 rose to \$5,190,691 or \$1.42 per share from \$3,406,760 or \$1.14 per share a year earlier.

As we enter the decade of the 1970s it is becoming increasingly obvious that the growing energy requirements of the United States for North American oil and natural gas will have a profound effect on the Canadian oil and gas industry in the years ahead. In recent testimony before the Standing Committee on Finance, Trade and Economic Affairs of the House of Commons, the Independent Petroleum Association of Canada estimated that only 11% of the potential oil reserves and 9% of the potential gas reserves in Canada have so far been discovered. The challenge and opportunity for our industry in the 1970s, made urgent by the emerging U.S. energy shortage, will be to mount exploration programs of sufficient magnitude to bring into the proven category a significant portion of the potential reserves believed to exist in the relatively unexplored sedimentary basins of Canada.

Exploration and producing operations of the Canadian oil and gas industry are expected to require expenditures of 21.9 billion dollars in the decade of the 1970s exclusive of an estimated 6 to 8 billion dollars for pipelines according to a recent industry estimate. The forecast level of spending for the 1970s compares with expenditures of 8.9 billion in the decade of the 1960s. Much of the exploration and development expenditures of the 1970s may be expected to be incurred in the new exploration frontiers of the Mackenzie Delta, Arctic Islands and off the East Coast as well as in the gas prone areas of the Western Canada Sedimentary Basin.

In recent years, including the fiscal year just ended, your company has made service industry investments in anticipation of the greatly increased rate of exploration activity foreseen in the years ahead for the Arctic North and offshore areas. In addition to Bow Valley's Arctic drilling and helicopter support activities for Panarctic Oils Ltd. and others, your company has recently associated itself with Canada's largest consulting and management organization, the Acres group of companies, and an international engineering, construction and drilling company, Santa Fe International Corporation to offer, under the name Bow Valley/Acres/Santa Fe-Pomeroy Arctic Services, design, engineering, management and construction services to natural resource industries in northern Canada and the Canadian Arctic Islands. Services to be offered include engineering of onshore structures and improvements, offshore mooring facilities, marine storage and transportation facilities, platforms and islands, channel and harbour dredging; pipelines and distribution facilities; drilling services; construction services; supervision and man-

agement; extraction, processing and transportation of natural resources; and many other services such as helicopter transportation, geophysical drilling services, communications and logistics. Operations are expected to cover the geographic area east of the Alaska-Canada border, north of the Arctic Circle, and eastward to the west coast of Greenland.

In December, 1969 your company acquired all the outstanding shares of Elworthy & Company Ltd. of Vancouver, British Columbia for a cash consideration of \$550,000. Elworthy & Company Ltd. manufactures and sells specialized machinery and control equipment for the sawmill industry. The acquisition of Elworthy extends the range of equipment for the forest products industry which your company now manufactures and sells through its wholly-owned subsidiary, Mainland Foundry & Engineering Ltd.

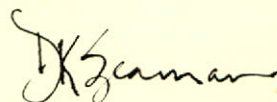
In April, 1970 Bow Valley acquired all the outstanding shares of Atmos Engineering Sales Ltd. of Calgary. The purchase price was \$300,000 of which \$200,000 was paid on closing with the remaining \$100,000 due on July 1st, 1974. In the event Atmos Engineering Sales Ltd.'s future earnings fall below certain levels, the final payment is subject to reduction. Atmos distributes heating and ventilating equipment to the building industry and industrial equipment to the gas processing industry. Its activities complement those provided by Flame-Master of Edmonton, a division of your company.

During May, 1970 Bow Valley acquired 100% direct ownership of Western Research & Development Ltd., Calgary based air and water pollution control company. In addition to acquiring direct ownership of the 41.75% of Western Research & Development Ltd.'s common shares previously indirectly owned by your company, Bow Valley also acquired direct ownership of all the remaining shares (58.25%) by a cash payment of \$285,000 plus the issuance of 20,000 Bow Valley Industries Ltd. common shares commencing in 1975. In the event Western Research & Development Ltd.'s future earnings fall below certain levels, the number of Bow Valley common shares to be issued in future payment for the acquisition will be reduced. In an associated acquisition in March, 1970 Bow Valley acquired all the outstanding shares of Dominion Instruments Ltd. of Edmonton, Alberta for \$75,000. Dominion Instruments in conjunction with Western Research & Development Ltd. is engaged in the design and manufacture of pollution and process control equipment.

Industry drilling activity in the Mackenzie Delta region of the Canadian Arctic should be higher during the coming winter drilling season than last year, as two additional rigs are being moved north this summer, increasing the total in the area to six.

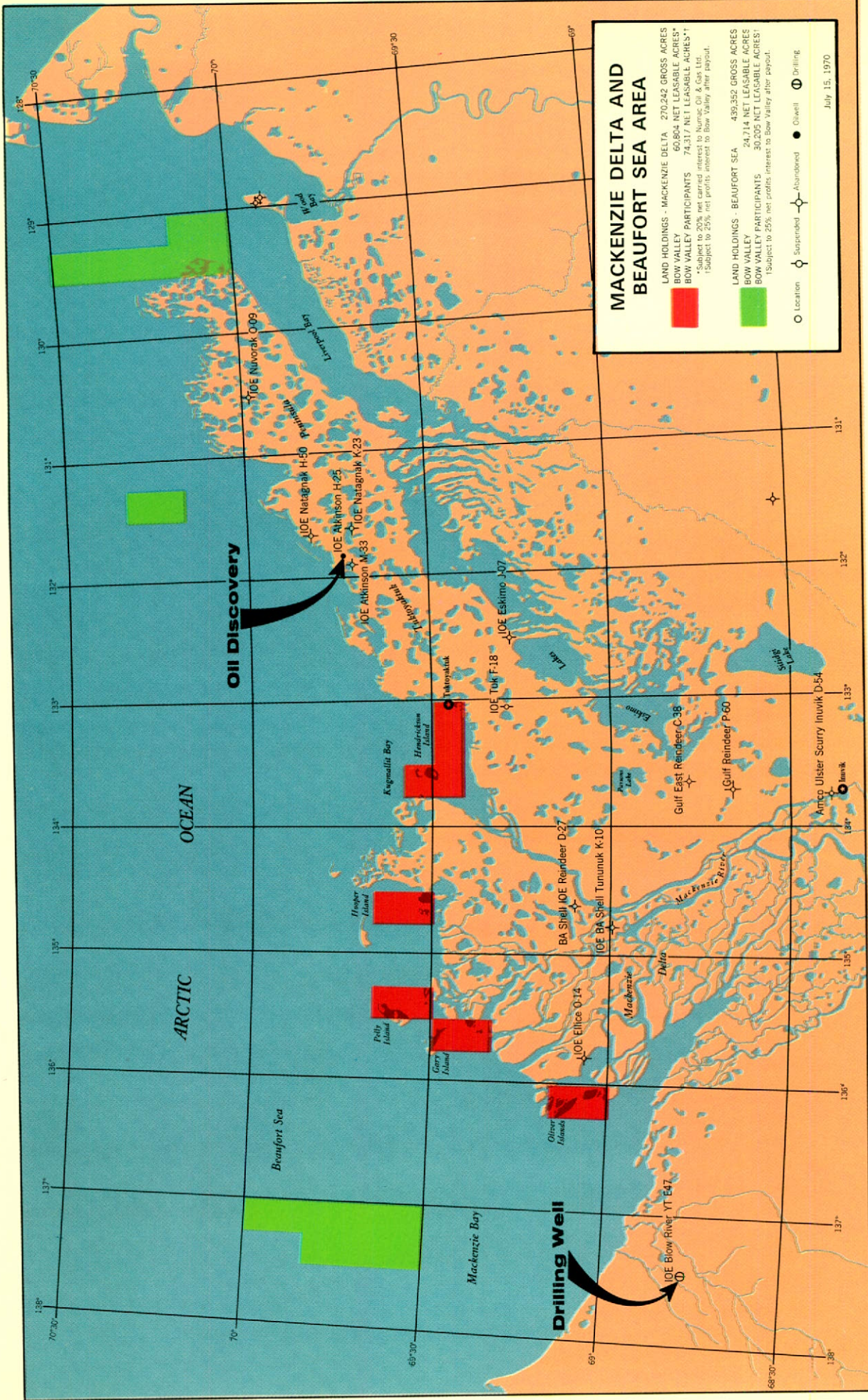
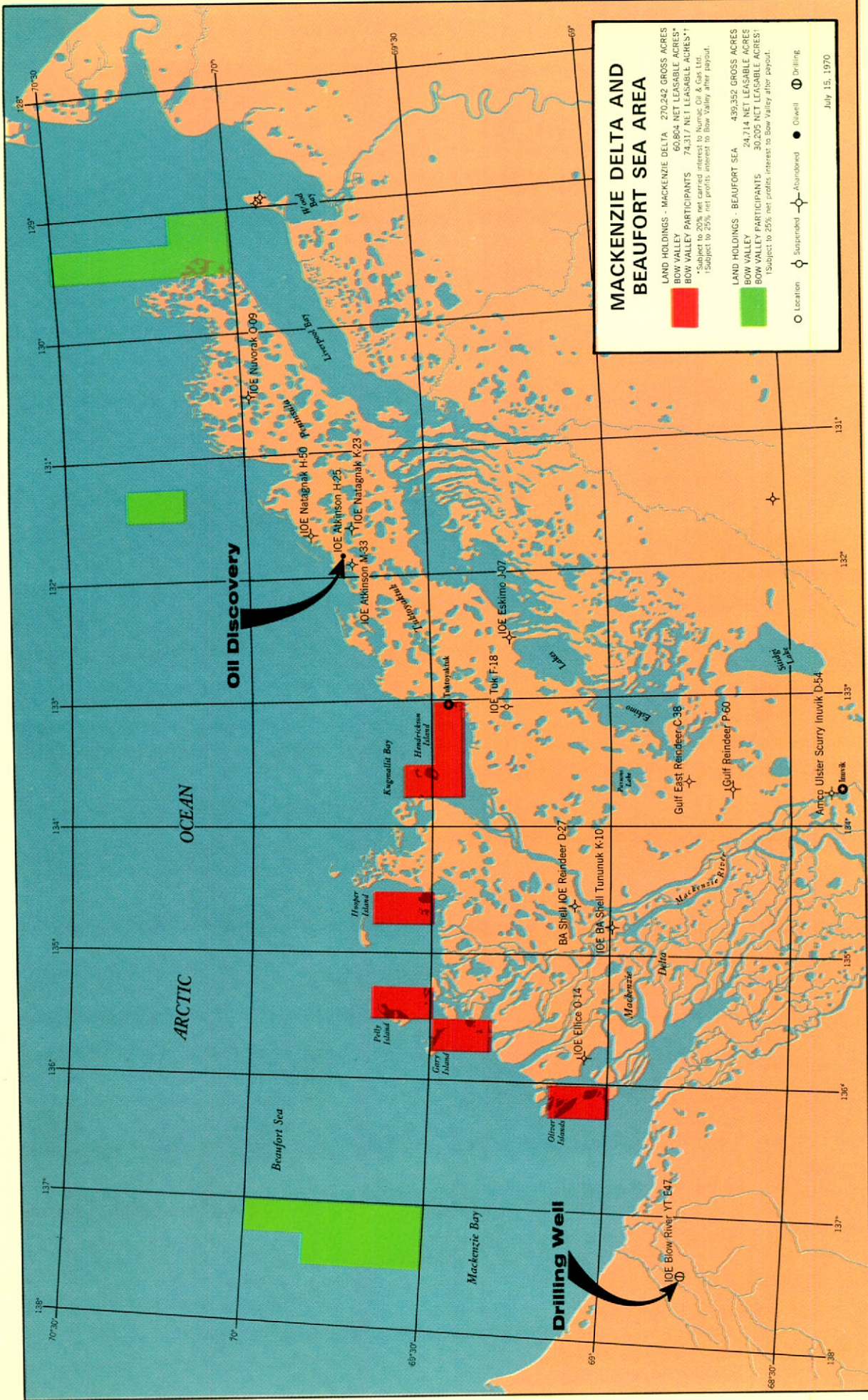
On June 1st, 1970, the day on which the Canadian dollar was allowed to float freely in the world currency market, your company had \$5,343,171.78 Canadian invested in U.S. funds deposit receipts. While the investment still remains in U.S. funds and no exchange loss has at present been realized, conservative accounting practice requires that the potential loss be reserved for currently and your company expects so to do during fiscal 1971.

The officers and directors wish to thank all personnel of the Bow Valley organization for their efforts on behalf of the company during the past year which made possible the financial results for fiscal 1970.



President

August 10, 1970.



## DRILLING ACTIVITY – FISCAL 1970

### DEVELOPMENT WELLS

TOTAL		OIL		GAS		ABANDONED	
Gross	Net	Gross	Net	Gross	Net	Gross	Net
8	2.20	1	0.10	7	2.10	–	–

### EXPLORATORY WELLS

TOTAL		OIL		GAS		ABANDONED	
Gross	Net	Gross	Net	Gross	Net	Gross	Net
67	7.33	–	–	3	2.33	64	5.0

## OIL AND GAS EXPLORATION AND DEVELOPMENT

### Review of 1970 Operations

Bow Valley's oil and gas exploration and development net expenditures for its own account amounted to \$3,165,090 in fiscal 1970 compared to \$1,515,044 last year. The fiscal 1970 total included the investment of \$679,324 in Panarctic Oils Ltd. and \$246,783 spent for the purchase of proven oil and gas reserves.

During fiscal 1970, your company managed \$1,308,449 for its oil and gas exploration participants, receiving an administration fee and earning a 25% net profits interest after payout. This compares with expenditures by Bow Valley's participants of \$3,307,084 in fiscal 1969. The decline was due in part to changed investment attitudes occasioned by the sharp drop in world security markets and in part to uncertainties created by the proposals for Canadian tax reform which affected investor confidence. In the latter connection, extensive hearings held by Committees of the House of Commons and the Senate during the past six months have revealed such universal concern regarding many of the proposals of the White Paper on Tax Reform that it now seems likely that the proposals will be revised prior to the submission of a government bill. The situation could well be clarified with resultant benefit to investor confidence when the reports of the committees of Parliament have been tabled this fall.

Drilling activity during the past year is summarized in the accompanying table. Bow Valley participated in the drilling of 75 gross wells, equivalent to 9.53 net wells. The results were 0.10 net oil producers, 4.43 net gas wells, and 5.0 net dry holes. The oil success was at Lampman in Saskatchewan while gas discoveries were made at Rigel in northeastern British Columbia, Obed, Sylvan Lake and Medicine Hat in the Province of Alberta. The large number of gross wells drilled this past year was the result of participating in a fifty-well program in southern Ontario, all of which were dry and abandoned. Your company had a 1.25% net interest in the program. The net figures shown in the table exclude interests which may be earned by Bow Valley in consequence of the 25% net profits arrangement with the company's participants. In addition to the drilling statistics presented in the table, twelve wells were drilled by other companies under farmout agreements, free of cost to Bow Valley, to earn an interest in a portion of your company's lands. One of these wells has been completed as an oil well and the remainder were dry and subsequently abandoned.


On May 31st, 1970 your company held interests in petroleum and natural gas rights totalling 3,776,154 gross acres corresponding to 756,552 net acres, compared with 3,311,045 gross acres and 1,255,312 net acres at the end of the previous year. The latest net figures have been adjusted by a reduction of 50% with respect to Federal Crown oil and gas permits to take into account the revocation, effective April 15th, 1970, of Oil and Gas Land Order 1-1961. The revocation of Oil and Gas Land Order 1-1961, while not affecting the rights of present permit holders to go to lease on 50% of the acreage, had the effect of removing the preferential rights of present permit holders to go to lease on the remaining 50% of the acreage at higher royalty rates. It is expected a new land order will be issued later this year in replacement of Land Order 1-1961 after consultation with industry. Whether the present permit holders will be given preferential status in respect to the acreage returned to the Crown cannot be ascertained at this time.


Bow Valley has continued its land acquisition program in new exploration areas and has substantially increased its net ownership in the Province of Alberta. The company's holdings are distributed throughout Canada in the three Prairie Provinces, East Coast offshore area, Hudson Bay, Mackenzie Delta, and Arctic Islands.

### Beaufort Sea - Mackenzie Delta

The Beaufort Sea - Mackenzie Delta map depicts drilling activity which has occurred in this area. The Beaufort Sea and adjoining coastal areas are geologically separated from the area to the south by a structural uplift or hinge belt. A young, thick sedimentary basin is located north of the hinge line while to the south are typical shelf sediments which are mainly Paleozoic in age. Thus the sea and coastal belt lie in a new, relatively unexplored, sedimentary basin which time may prove to be geologically linked to the Sverdrup basin in the Arctic Islands and the North Slope of Alaska. Imperial's Atkinson Point Lower Cretaceous oil discovery is located in this basin. Although subsequent holes have proved to be disappointing, the presence of oil in the basin is a very positive indication of its potential. The area is structurally complex and seismic interpretation is hampered by technical problems involving permafrost and energy sources. Substantial exploration is required to evaluate the many structures and various sedimentary facies which occur.

# ARCTIC ISLANDS AREA

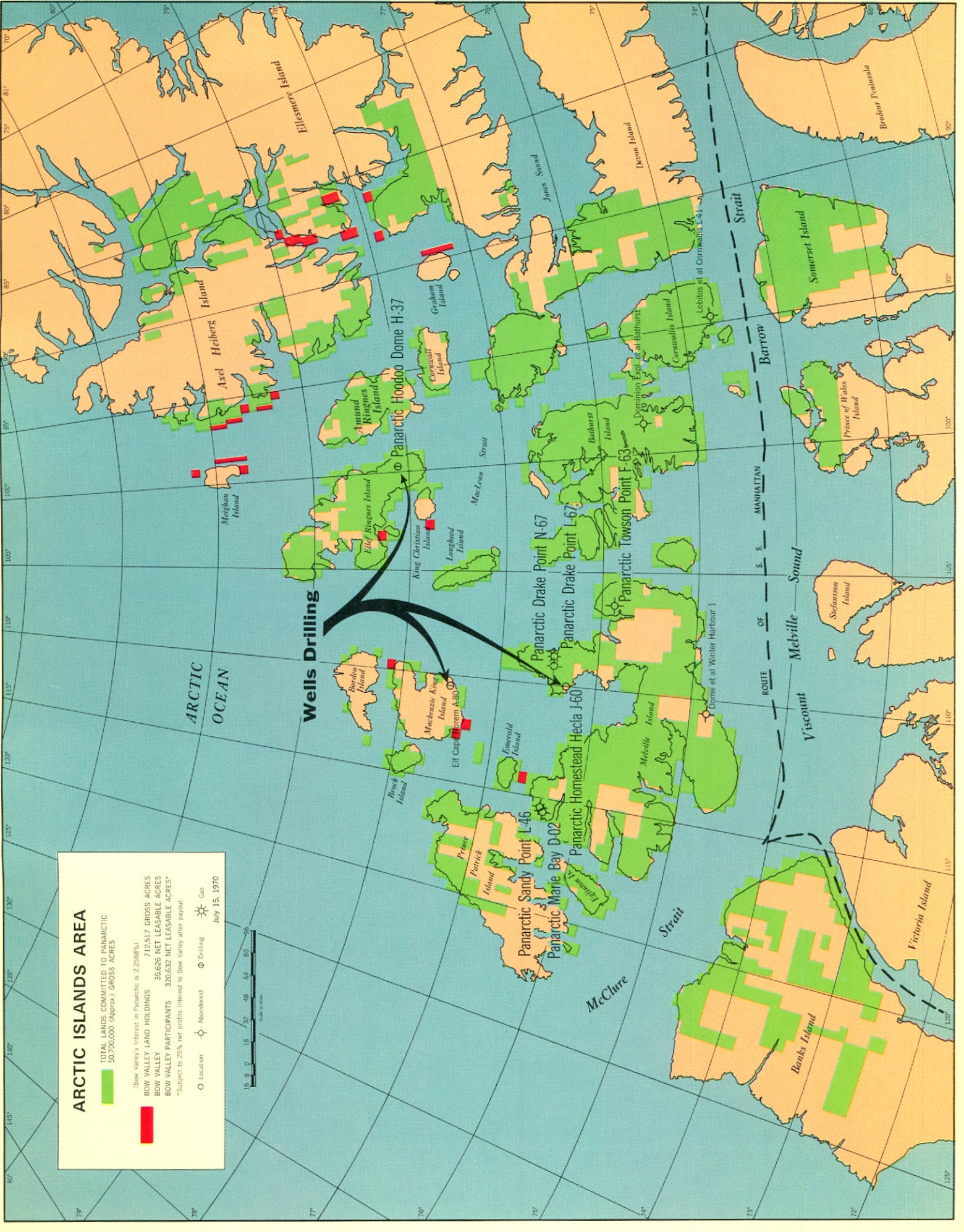
 TOTAL LANDS COMMITTED TO PANARCTIC  
50,700,000 (Approx.) GROSS ACRES

(Bow Valley's interest in Panarctic is 2,258,800)  
 BOW VALLEY LAND HOLDINGS 712,517 GROSS ACRES  
 BOW VALLEY 35,626 NET LEASABLE ACRES  
 BOW VALLEY PARTICIPANTS 320,632 NET LEASABLE ACRES\*

\*Subject to 25% net profits interest to Bow Valley after payout.

 Location  Abandoned  Drilling  Gas

July 15, 1970





Bow Valley holds acreage in the East Beaufort, Mackenzie Delta and West Beaufort areas. Seismic programs have been conducted on all three areas and further work is programmed for this summer. The reconnaissance seismic has mapped promising structures and further detail will be required to pick drilling locations. Your company has also obtained the information on the Imperial Ellice Island well on a confidential basis. Bow Valley's Mackenzie Delta holdings are located in a geologically attractive delta facies similar to those which are productive in many other portions of the world.

### Arctic Islands

The map of the Arctic Islands shows the acreage committed to Panarctic Oils Ltd. Bow Valley has a 2.2588% interest in Panarctic and in addition holds a 10% interest, with Bow Valley's participants holding a 90% interest, subject to a 25% net profits interest to Bow Valley, in 712,517 acres in the Sverdrup Basin of the Arctic Islands. The map gives the location of the exploratory wells drilled to date as well as the wells now drilling.

Until recently, exploration activity in the Arctic Islands has largely been the work of Panarctic Oils Ltd. However, the level of interest is increasing and many other companies are now either exploring or preparing to explore in the area. The level of drilling activity is expected to rise with a total of eight drilling rigs scheduled to be in the Islands by the end of this summer.

### Moberly

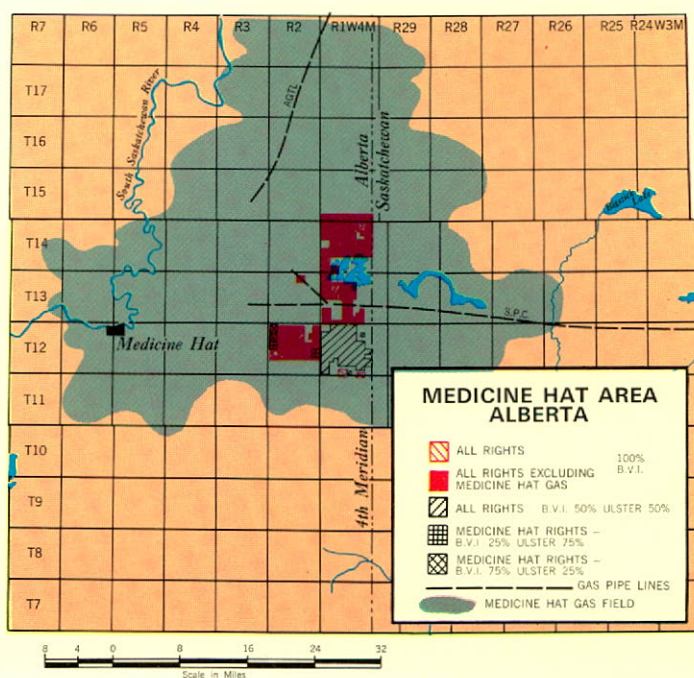
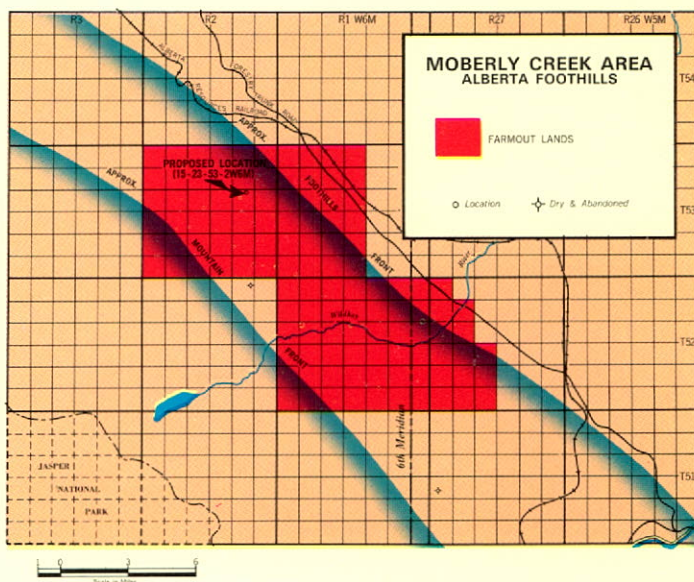
In line with your company's policy to concentrate part of its exploration budget on the search for major gas reserves, Bow Valley is participating in a farmout from a major oil company in the Moberly Creek area of the Central Alberta foothills. While this is a high risk venture, the potential rewards, if the venture is successful, are also high. A comprehensive geophysical program has mapped a large foothills structure involving the Mississippian. The structure, as mapped by seismic, is 25 miles long and from one to three miles wide and has the possibility of containing major gas reserves. The farm-in acreage as shown on the map contains 73,340 gross acres with a Mississippian test to 10,700 feet earning 29,336 gross acres. Your company will earn a 6% working interest in the prospect by paying 15% of the costs.

### Medicine Hat

The Medicine Hat map shows the company's land holdings in that area of southeastern Alberta. Gas was first discovered in the area long before the turn of the century. Production is from a shallow Upper Cretaceous sand called the Medicine Hat Formation and is the source of gas supply for the City of Medicine Hat and much of the Province of Saskatchewan. The Saskatchewan Power Corporation is at present the major exporter of gas. The field straddles the Alberta-Saskatchewan border and is one of the largest gas fields in Canada both in areal extent and in terms of reserves. Initial marketable reserves exceeded 2.5 trillion cubic feet of gas and remaining marketable reserves exceed 1.7 trillion cubic feet of gas.

Overlying the Medicine Hat sand at a depth of approximately 1,000 feet is another shallow gas sand called the Milk River Formation. The sand has a thickness of approximately 300 feet in the field area. Until recently this formation was not seriously considered as a significant source of natural gas. However, because of improved gas prices, new technology in drilling and completion methods this shallow gas sand has become an economic venture.

Both the Medicine Hat and Milk River sands lie on the north-easterly flank of the Sweetgrass Arch and the gas accumulations occur in large stratigraphic traps.



During the past year your company has acquired a substantial land position in the field area. To date, Bow Valley holds a total of 55,120 net acres of land of which 11,440 net acres contain all petroleum and natural gas rights and the remaining 43,680 net acres exclude the Medicine Hat gas rights. Your company has drilled two successful Milk River sand gas wells and four successful Medicine Hat sand gas wells. Bow Valley's ownership in these four latter wells is a net fifty percent. Markets are available through Trans-Canada Pipe Lines Limited and Saskatchewan Power Corporation. Your company is currently formulating plans to develop and market the gas.

### Sylvan Lake

The map of Sylvan Lake shows the company's land holdings in that area which is located in south central Alberta where Bow Valley already has a number of Mississippian oil producers. During the past year, as a result of seismic programs, additional acreage was acquired and a successful Lower Cretaceous gas well drilled in Lsd 10-23-38-3 W5th meridian. The test well established two gas pay zones in Basal Quartz sands of Lower Cretaceous age. Drill stem test of the upper pay gave a gas blow of 6,520 mcf/d while the lower zone tested 5,700 mcf/d. The well is located near gas pipelines and two gas plants which are currently

operating at capacity. Further testing and drilling will be undertaken when the marketing picture has been clarified.

### Production

Sales of crude oil and natural gas liquids, after deduction of royalties, averaged 1,806 barrels per day in the 1970 fiscal period compared to 1,552 barrels per day in the previous year. Natural gas sales averaged 2,299 mcf per day in fiscal 1970 compared to 2,415 mcf per day in fiscal 1969. These figures include a net profits interest, shown as a sales volume, on some of the producing properties. The table below gives comparative figures for the most recent three years.

	Fiscal year ended May 31		
	1970	1969	1968
Crude Oil (barrels) . . .	634,178	537,146	506,401
Natural Gas Liquids (barrels) . . . . .	25,213	29,320	21,993
Natural Gas (mcf) . . .	839,368	881,440	875,314

(Note: The above figures are net after royalty and include Bow Valley's net profits interest).

### SUMMARY OF EXPLORATORY ACREAGE

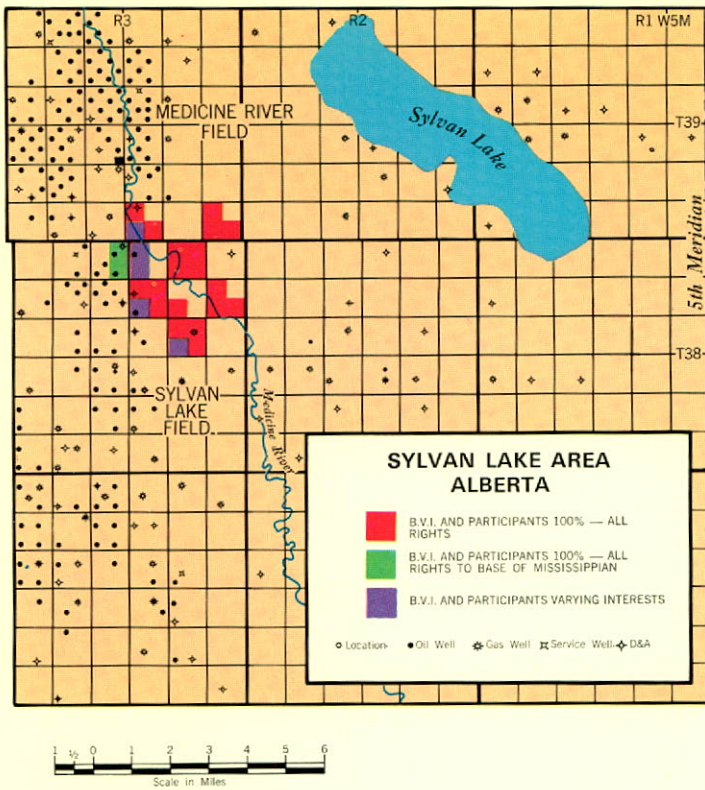
As of May 31, 1970

LOCATION	TYPE OF INTEREST	GROSS ACRES	NET LEASABLE ACRES	
			(1) Bow Valley	(2) Bow Valley's Participants
Alberta . . . . .	Leases . . . . .	587,767	162,585	181,774
	Petroleum and Natural Gas Reservations	286,720	89,304	18,080
	Petroleum and Natural Gas Permits . . .	146,002	136,457	-
	Drilling Reservations . . . . .	18,560	172	198
	Indian Oil and Gas Permits . . . . .	35,280	441	8,379
		<u>1,074,329</u>	<u>388,959</u>	<u>208,431</u>
Arctic Coast and Mackenzie Delta . . . . .	Federal Oil and Gas Permits . . . . .	709,594	* 85,518	* 104,522
		<u>712,517</u>	* <u>35,626</u>	* <u>320,632</u>
Arctic Islands . . . . .	Federal Oil and Gas Permits . . . . .	177,818	* 10,443	* 4,476
Atlantic East Coast . . . . .	Leases . . . . .	31,936	5,200	5,054
	Petroleum and Natural Gas Permits . . .	42,789	1,003	15,043
		<u>74,725</u>	<u>6,203</u>	<u>20,097</u>
Hudson Bay . . . . .	Federal Oil and Gas Permits . . . . .	898,431	* 224,608	-
Ontario . . . . .	Leases . . . . .	122,500	3,062	-
Saskatchewan . . . . .	Leases . . . . .	6,240	2,133	832
TOTAL ACREAGE . . . . .		<u>3,776,154</u>	<u>756,552</u>	<u>658,990</u>

(1) Excludes Bow Valley's net profits interest.

(2) Bow Valley has a 25% net profits interest after payout in any future production from these lands.

\* These figures have been adjusted by a reduction of 50% to take into account the revocation of Oil and Gas Land Order 1-1961 effective April 15, 1970. (See text).



Hi-Tower Drilling rig operating in central Alberta.



## MINERAL EXPLORATION

Bow Valley spent \$195,360 on mineral exploration in fiscal 1970, compared to \$150,589 expended last year. Expenditures by Bow Valley's participants rose to \$261,610 from \$145,926 in fiscal 1969.

A considerable amount of exploratory survey work was done on approximately 845,000 acres of land south of Lake Athabasca in northern Saskatchewan in which your company acquired a 12½% interest from Numac Oil & Gas Ltd. Evaluation of two mineral claim blocks in the Cree River area and two mineral prospecting permits in the Wollaston Lake area resulted in these lands being dropped. Drilling was undertaken on a mineral prospecting permit in the Wollaston Lake area and on mineral claim blocks in the Carswell Dome area without finding any significant mineralization. However, further work is planned to evaluate one permit where mineralization is evident from surface geological investigation.

Bow Valley carried out geophysical surveying on other land holdings in the general Athabasca Sandstone uranium prospecting area. This work resulted in the surrender of your company's 100% interest in a 192,000 acre prospecting permit in the Patterson Lake area of Saskatchewan, and also of a 12½% interest in mineral prospecting permits totalling 199,680 acres in the South Athabasca area of Alberta. Bow Valley's 25% interest in a 192,000 acre mineral prospecting permit in the Mirror River area was retained for a further year. Inconclusive drilling of slight radioactive showings in Athabasca Sandstone was carried out on some 209,000 acres of holdings in the Cree Lake area in which Bow Valley has a 12½% interest.

Bow Valley has a 12½% interest in various programs in the Atlin and Cassiar areas of northern British Columbia and the St. Elias region of the Yukon. In addition to exploratory work in search of new mineral occurrences, evaluation by diamond drilling is being programmed on a group of claims in the St. Elias area.

## OIL AND GAS CONTRACT DRILLING

Your company's three oil and gas contract drilling divisions, **Antelope Drilling**, **Hi-Tower Drilling** and **Sedco Drilling** drilled 1,561,924 feet in fiscal 1970 compared to 1,279,054 feet last year. Sales and earnings of Sedco and Antelope exceeded last year's results while Hi-Tower's level of activity and earnings were down from fiscal 1969 reflecting a lack of discoveries at medium depth adversely affecting Hi-Tower's type of equipment.

The **Commonwealth-Hi-Tower** venture in the Arctic in which Bow Valley holds a 50% interest now has three rigs under contract to Panarctic Oils Ltd. The outlook for drilling activity in the Arctic Islands is good and the Commonwealth-Hi-Tower venture is in an excellent position because of its experience in the area as well as its industry background and financial resources to compete for future business as it develops.

## MINING CONTRACT DRILLING

**Connors Drilling Ltd.**, the larger of your company's mining contract drilling subsidiaries registered a good increase in gross revenues and net profit over fiscal 1969 results. During fiscal 1970, Connors drilled a total of 461,275 feet, a new record for the company. This compares with 356,976 feet drilled last year. Mining activity continues at a high level in British Columbia.

**Griffith Bros. Drilling Limited**, Bow Valley's Manitoba based mining contract drilling subsidiary acquired during fiscal 1970, drilled 203,100 feet in the year just ended. The company's work areas included northern Manitoba, northern Saskatchewan, and northwestern Ontario as far east as Thunder Bay.

## AVIATION SERVICES

The name of your company's aviation subsidiary was changed to **Bow Helicopters Ltd.** during the year to reflect its ownership by Bow Valley and the departure of the previous owners from the business.

Operating results of Bow Helicopters showed improvement over fiscal 1969 particularly during the second half of the year when demand for the larger sized helicopters in which the company specializes was particularly strong for Arctic work.

During the year Bow Helicopters added a Bell 205A to its fleet which now numbers sixteen helicopters including two Bell 205A and four Bell 204B machines.

The increase in exploration activity anticipated for the Canadian Arctic should result in increased demand for helicopter services during the foreseeable future.



Bow Helicopters preparing to lift seismic drill in Arctic Islands.

Bow Helicopters transports skiers in the Bugaboo Range of the Rocky Mountains.



## FOUNDRY AND ENGINEERING ACTIVITIES

**Mainland Foundry & Engineering Ltd.**, one of Bow Valley's Vancouver based subsidiaries achieved a 33% sales increase in fiscal 1970 over the preceding twelve months in the manufacturing, service and supply line business.

In April, 1970 the Vancouver offices were moved into a new 90,000 sq. ft. building constructed on company-owned property. During the year the company's new branch office in Edmonton, Alberta became firmly established. A conveyor belting installation and repair service established by the company in Vancouver and Prince George has proved successful.

Mainland's development of narrow saw control methods has assisted the lumber industry in reducing wood waste and has created increased sales for the company, particularly in eastern Canada and Alaska. A chipper-canter for full small-wood utilization has been designed and is ready for manufacture.

Mainland's manufacture and promotion of the patented Lausmann Process\*, an effective means of eliminating smoke and particle fallout from the traditional sawmill wig-wam burner in conformity with pollution control regulations, is considered to have good potential in fiscal 1971.

\*Manufactured under agreement with the J. S. Lausmann Corporation.

Mainland's new Vancouver office building.

**Elworthy & Company Ltd.** became a wholly owned subsidiary of your company on December 15, 1969. The Vancouver based manufacturer of specialized machinery and control equipment for the sawmill industry enjoyed a good year in fiscal 1970.

Several interesting contracts have been secured recently. A 150 h.p. DC barker drive is on order for the Ketchikan Pulp and Paper Company in Ketchikan, Alaska, and instructions have just been received to proceed with the static logic control system for the Rainbow Pipe Line Company Ltd. in Calgary.

During the early part of the year an increasing part of the company's business consisted of sales to mills in the U.S.A. and it would appear likely that this trend can be expected to continue as Elworthy equipment becomes better known in that market.

A series of strikes affecting the forest products industry in British Columbia is currently influencing the company's sales. The rise in value of the Canadian dollar is an adverse development for an industry heavily reliant on the export market. However, the longer term outlook for the British Columbia forest products industry is excellent in view of the housing shortage which has developed during the high interest rate, tight money era of recent years.



## SALE OF OILFIELD EQUIPMENT AND SUPPLIES

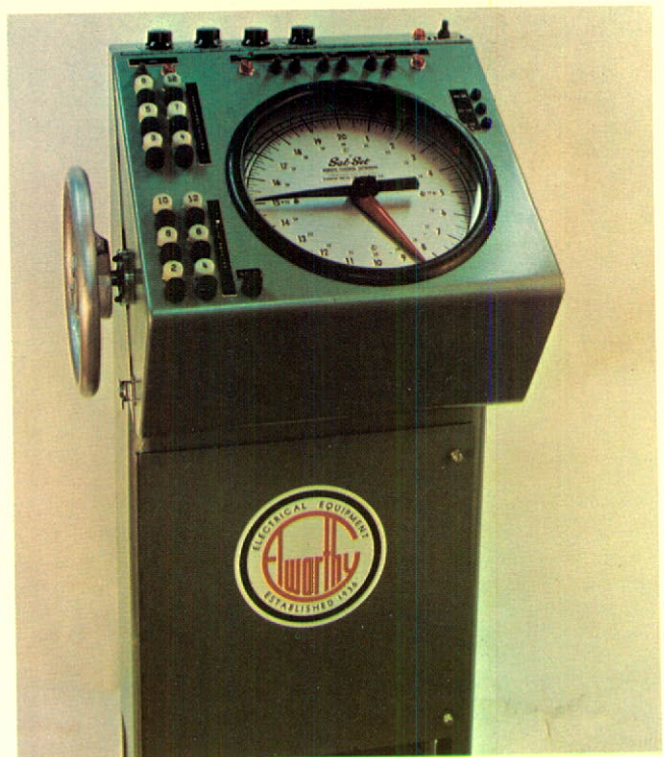
**Cardwell Supply Ltd.** continues to maintain its position as a leading supplier to the oil and gas industry in Western Canada. The company's Logistics Systems Division completed its work for Great Canadian Oil Sands Ltd. at Fort McMurray, Alberta, and carried out contracts involving the establishment and reorganization of stores systems for McIntyre Porcupine Mines Limited and Shell Canada Limited. The Division is presently shipping materials to Resolute in the Arctic where a supply depot is being established to service oil companies operating in the Arctic. It is the intention of your supply division to continue to expand this phase of its operation by offering its expertise in support activities in difficult logistic areas to the oil and gas industry.

## MANUFACTURE OF FORCED AIR HEATING EQUIPMENT

Sales in the **Flame-Master** division of Bow Valley showed a very modest increase in the past fiscal year, which reflects the general slowdown in the construction industry.

A new 11,000 BTU heater designed for recreational trailers was introduced to the market this spring. An enthusiastic reception by trailer manufacturers and the public at large promises a strong demand for this product.

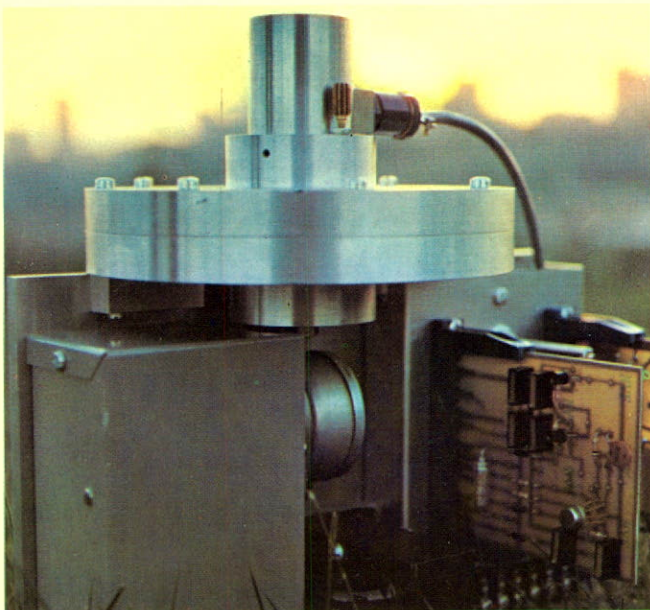
The "New Products" division of Flame-Master is working closely with **Atmos Engineering Sales Ltd.**, newly acquired Bow Valley subsidiary, in developing heating and air conditioning units for commercial and industrial markets. It is expected that the "New Products" division will generate substantially increased revenue in fiscal 1971.



An Elworthy sawmill control console.

Flame-Master's new trailer heater.





The Pitoflo Recorder.



Western R&D technician checks instrument in pollution monitoring trailer.

## PIPE LINE CONSTRUCTION AND GAS PLANT MAINTENANCE

**Wonderly & Kershaw Petrochemical Services Ltd.** had gross revenue of \$4,260,499 during the eleven months of fiscal 1970 since becoming a Bow Valley subsidiary. The company's plant maintenance program included work for Shell Canada Limited (Waterton and Jumping Pound) and Banff Oil Ltd. (Rainbow Lake). Turnarounds were performed for Pacific Petroleum Ltd., Canadian Fina Oil Limited, Shell Canada Limited and Banff Oil Ltd. Pipeline construction involved work for Dome Petroleum Ltd.

## POLLUTION CONTROL

Significant progress was made by **Western Research & Development Ltd.** during the year. The company, which this year became a wholly owned subsidiary of Bow Valley, moved into new offices and opened a new laboratory to accommodate an expanding research and development program. The scientific and technical staff, now totalling twenty, provides consulting and technical services, instrumentation and equipment in the area of environmental control, including air, water and noise pollution abatement, and process control.

Western R & D, in conjunction with the Federal Government, is undertaking a development program for the economic reduction of sulphur dioxide emission in gas processing plants. The project involves joint financial participation by Western R & D and the federal Department of Industry, Trade and Commerce through its Program for Advancement of Industrial Technology. The two-year program will involve an expenditure of approximately \$400,000.

Another project of the company which is currently nearing completion, is the development of a Continuous Stack Emission Monitoring System to continuously monitor gaseous emissions from processing plants. It is anticipated that the system will have wide application.

**Dominion Instruments Ltd.**, which was acquired by Bow Valley in fiscal 1970, operates as a designer of specialized instrumentation in the areas of environmental control and pipeline metering. The Pitoflo Recorder\*, which records gas velocity in plant stacks, is now in production, as is another instrument which is used in conjunction with the Pitoflo Recorder for continuous stack emission monitoring.

Dominion also has in production a wind instrument of unique characteristics which has application in the oil industry and a number of other areas. The company is currently engaged in designing a series of instruments for air pollution control which will be marketed by Western Research & Development Ltd. and is involved in several other projects in diverse fields.

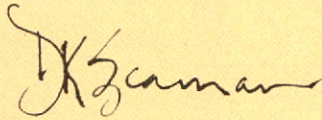
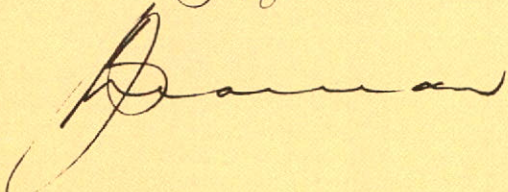
\*Manufactured under license from Shell Internationale Research.

## AFFILIATED COMPANIES

During fiscal 1970 **Computamatics Limited**, owned 50% by Bow Valley, completed program development and implementation of several major projects. These programs include automatic creation of progress reports for oil and gas projects, a pumping well dynamometer analysis program, a production data system, a payroll accounting system and absolute open flow and pressure build up systems for the oil and gas industry in Canada.

Bow Valley continues to hold a 10.7% interest in **Western Rock Bit Company Limited**. The company manufactures drilling bits and has just completed the most successful year in its history.

CONSOLIDATED BALANCE SHEET

Assets		<u>1970</u>	<u>1969</u>
<b>Current Assets</b>			
Cash, including deposit receipts (Note 14) . . . . .		\$ 6,344,919	\$ 9,938,805
Accounts receivable—			
Trade . . . . .		6,809,084	5,546,003
Other . . . . .		286,038	505,998
Inventories (Note 3) . . . . .		3,708,024	6,804,200
Prepaid expenses . . . . .		526,826	306,039
		<u>17,674,891</u>	<u>23,101,045</u>
<b>Capital Assets</b> , at cost (Notes 4 and 5) . . . . .		35,714,405	28,012,388
Less — Accumulated depreciation and depletion . . . . .		<u>13,357,637</u>	<u>10,095,152</u>
		22,356,768	17,917,236
<b>Cost of Investment in Subsidiaries in Excess of Book Value,</b>			
at date of acquisition (Note 1) . . . . .		3,567,952	1,883,243
<b>Other Assets and Deferred Charges</b>			
Interest in Panarctic Oils Ltd., at cost . . . . .		1,132,203	452,879
Investments (at cost) in and advances to other companies . . . . .		283,852	211,652
Sundry . . . . .		123,384	224,184
Unamortized deferred charges (Note 6) . . . . .		543,727	558,524
		<u>2,083,166</u>	<u>1,447,239</u>
Approved on behalf of the Board:			
	Director		
	Director		
		<u><u>\$45,682,777</u></u>	<u><u>\$44,348,763</u></u>



- MAY 31, 1970 (Canadian dollars)

## Liabilities

	<u>1970</u>	<u>1969</u>
<b>Current Liabilities</b>		
Operating bank loans, secured (Note 2) . . . . .	\$ 1,685,044	\$ 2,648,326
Bankers' acceptances, secured (Note 2) . . . . .	1,100,000	3,000,000
Accounts payable and accrued . . . . .	5,378,853	4,466,633
Amount owing on purchase of a subsidiary company . . . . .	—	101,106
Estimated income taxes payable . . . . .	321,237	31,325
Long term debt due within one year . . . . .	994,610	979,066
	9,479,744	11,226,456
<b>Long Term Debt</b> (Note 7) . . . . .	4,628,532	4,462,211
<b>Deferred Revenue</b> . . . . .	204,360	—
<b>Deferred Income Taxes</b> (Note 8) . . . . .	671,433	463,398
<b>Shareholders' Equity</b>		
Share capital (Note 9)—		
5½% Cumulative redeemable preferred shares		
Series A of a par value of \$20 each—		
Authorized and issued — 100,000 shares		
Outstanding — 90,290 shares (1969 - 92,980) . . . . .	1,805,800	1,859,600
5% Cumulative redeemable convertible second preference shares of a par value of \$100 each—		
Authorized, issued and outstanding — 100,000 shares . . . . .	10,000,000	10,000,000
Common shares of no par value—		
Authorized — 6,000,000 shares		
Issued and outstanding — 3,249,342 shares (1969 - 3,185,112) . . . . .	9,286,635	8,224,966
Capital redemption reserve fund, on redemption of preferred shares . . . . .	194,200	140,400
Contributed surplus, on redemption of preferred shares . . . . .	38,501	25,885
Retained earnings, per statement attached (Note 10) . . . . .	9,373,572	7,945,847
	30,698,708	28,196,698
<b>Contingent Liabilities and Commitments</b> (Note 11)		
	\$45,682,777	\$44,348,763

**CONSOLIDATED STATEMENT OF INCOME**

For the year ended May 31, 1970 (Canadian dollars)

	<u>1970</u>	<u>1969</u>
<b>Income</b>		
Contract drilling—		
Oil and gas . . . . .	\$12,524,386	\$11,160,722
Mining . . . . .	4,493,206	2,259,027
Pipeline construction and plant maintenance . . . . .	4,260,499	—
Sales of oilfield equipment and supplies . . . . .	8,027,903	11,803,820
Foundry, engineering and forest equipment sales . . . . .	8,272,767	3,997,738
Oil and gas sales, less royalties . . . . .	1,563,807	1,549,711
Aviation services . . . . .	2,709,599	1,751,642
Heating equipment sales . . . . .	1,295,540	1,137,415
Investment . . . . .	645,524	77,725
Other . . . . .	345,978	515,564
	<u>44,139,209</u>	<u>34,253,364</u>
<b>Costs and Expenses</b>		
Cost of sales . . . . .	15,622,232	14,689,673
Operating costs . . . . .	18,203,548	12,763,397
General and administrative . . . . .	4,015,767	2,746,820
Depreciation and depletion . . . . .	2,541,593	1,775,047
Mining properties abandoned . . . . .	32,239	38,648
Amortization of deferred charges . . . . .	156,320	95,328
Interest — On long term debt . . . . .	469,812	399,517
— Other . . . . .	289,048	255,402
	<u>41,330,559</u>	<u>32,763,832</u>
	2,808,650	1,489,532
<b>Taxes on Income (Note 8)</b>		
Current . . . . .	347,534	(8,205)
Deferred . . . . .	95,628	(54,935)
	<u>443,162</u>	<u>(63,140)</u>
<b>Income Before Extraordinary Item</b> . . . . .	2,365,488	1,552,672
<b>Extraordinary Item — Gain on sale of investments</b> . . . . .	—	251,119
<b>Net Income</b> . . . . .	<u>\$ 2,365,488</u>	<u>\$ 1,803,791</u>
<b>Earnings per common share — (Note 13)</b>		
Income before extraordinary item . . . . .	\$ .55	\$ .47
Extraordinary item . . . . .	—	.08
Net income . . . . .	<u>\$ .55</u>	<u>\$ .55</u>

**CONSOLIDATED STATEMENT OF SOURCE AND APPLICATION OF FUNDS** For the year ended May 31, 1970 (Canadian dollars)

	<u>1970</u>	<u>1969</u>
<b>Source of Funds</b>		
Operations —		
Income before extraordinary items . . . . .	\$2,365,488	\$ 1,552,672
Add — Non-cash charges, including depreciation and depletion, mining properties abandoned, amortization of deferred charges, gains and losses on disposal of capital assets and deferred taxes on income . . . . .	2,825,203	1,854,088
	<u>5,190,691</u>	<u>3,406,760</u>
Proceeds from extraordinary item —		
Sale of investments . . . . .	—	923,000
Deferred revenue . . . . .	204,360	—
Share capital issued, less costs of issue —		
Common shares . . . . .	138,629	1,241,223
Second preference shares . . . . .	—	9,698,778
Other . . . . .	100,800	346,555
	<u>5,634,480</u>	<u>15,616,316</u>
<b>Application of Funds</b>		
Net additions to capital assets —		
Land, buildings, drilling and other equipment . . . . .	3,186,397	2,485,235
Oil and gas properties and equipment and mining properties . . . . .	2,681,126	1,665,633
Decrease in long term debt — net . . . . .	6,602	615,150
Interest in Panarctic Oils Ltd. . . . .	679,324	—
Investments in and advances to other companies . . . . .	68,601	121,809
Investment in shares of subsidiary companies, less working capital thereof . . . . .	1,634,496	1,058,467
Redemption of preferred shares . . . . .	41,184	31,740
Cash dividends paid . . . . .	883,963	419,833
Other . . . . .	132,229	278,739
	<u>9,313,922</u>	<u>6,676,606</u>
<b>(Decrease) Increase in working capital . . . . .</b>	<b>(3,679,442)</b>	<b>8,939,710</b>
<b>Working capital, beginning of year . . . . .</b>	<b>11,874,589</b>	<b>2,934,879</b>
<b>Working capital, end of year . . . . .</b>	<b><u>\$8,195,147</u></b>	<b><u>\$11,874,589</u></b>

## Bow Valley Industries Ltd. and Subsidiary Companies

### CONSOLIDATED STATEMENT OF RETAINED EARNINGS

For the year ended May 31, 1970 (Canadian dollars)

	1970	1969
<b>Balance, beginning of year</b> . . . . .	\$ 7,945,847	\$ 6,903,111
Net income for the year . . . . .	2,365,488	1,803,791
	<u>10,311,335</u>	<u>8,706,902</u>
<b>Deduct —</b>		
Cash dividends paid —		
Preferred Shares Series A (5½%) . . . . .	100,798	103,323
Second Preference Shares (5%) . . . . .	458,959	—
Common Shares (\$.10 per share) . . . . .	324,206	316,510
Cost of issue of Second Preference Shares . . . . .	—	301,222
Amount transferred to capital redemption reserve fund . . . . .	53,800	40,000
	<u>937,763</u>	<u>761,055</u>
<b>Balance, end of year</b> . . . . .	<u>\$ 9,373,572</u>	<u>\$ 7,945,847</u>

### NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

#### 1. Accounting Presentation

The consolidated financial statements include the accounts of the Company and its subsidiaries, all of which are wholly owned. These consolidated financial statements also reflect the Company's 50% interest in the assets, liabilities, revenue and expenses of a contract drilling joint venture.

During the year the Company acquired the outstanding shares of Atmos Engineering Sales Ltd., Dominion Instruments Ltd., Elworthy & Company Ltd., Griffith Bros. Drilling Limited, Western Research & Development Ltd. and Wonderly & Kershaw Petrochemical Services Ltd. The total consideration consisted of 40,320 previously unissued common shares of the Company and \$1,833,000 cash. Additional consideration, as outlined in Note 11, may also be payable. These transactions have been accounted for as purchases and the earnings of the subsidiaries have been included from the effective dates of acquisition.

The cost of investments in subsidiaries in excess of book value at date of acquisition, other than the portion allocated to capital assets, which is being depreciated and depleted, is not being amortized. Management believes there are no reasons to expect any significant decrease in the value of this intangible asset and accordingly does not contemplate amortization of such excess cost.

#### 2. Current Assets Subject to Liens

Bankers' acceptances are mainly secured by a \$2,000,000 floating charge demand debenture on the current assets of a subsidiary as well as by a \$2,000,000 chattel mortgage of the subsidiary and by guarantees of the Company. The Company and certain subsidiaries have given a general assignment of receivables to secure their respective bank obligations.

#### 3. Inventories

Inventories, which are valued at the lower of cost or net realizable value, consist of the following:

	1970	1969
Finished goods . . . . .	\$2,011,072	\$5,713,930
Work in progress . . . . .	114,065	125,721
Raw materials . . . . .	428,597	217,847
Materials and supplies . . . . .	1,042,719	746,702
Oil and gas properties and rights held for resale . . . . .	111,571	—
	<u>\$3,708,024</u>	<u>\$6,804,200</u>

The finished goods inventory included merchandise valued at \$3,963,050 at May 31, 1969 which was held exclusively for sale to Great Canadian Oil Sands Limited. The sale agreement was terminated during the year and all inventory was sold at cost (as defined) to Great Canadian Oil Sands Limited.

#### 4. Capital Assets and Depreciation Policies

	1970		1969	
	Cost	Accumulated depreciation and depletion	Net book value	Net book value
Drilling and related equipment . . . . .	\$12,506,207	\$ 7,301,691	\$ 5,204,516	\$ 4,341,289
Oil and gas properties and equipment . . . . .	14,686,026	3,453,646	11,232,380	9,471,070
Manufacturing plant and equipment . . . . .	1,722,833	792,526	930,307	632,732
Sales and service equipment . . . . .	1,667,498	914,564	752,934	92,632
Helicopters and related equipment . . . . .	3,172,668	448,248	2,724,420	2,264,286
Land and buildings . . . . .	1,959,173	446,962	1,512,211	1,115,227
	<u>\$35,714,405</u>	<u>\$13,357,637</u>	<u>\$22,356,768</u>	<u>\$17,917,236</u>

Depreciation of drilling and related equipment is calculated by the diminishing balance method mainly at the rate of 20%, oil and gas well and battery equipment by the straight line method at the rate of 10%, manufacturing and sales and service equipment by the diminishing balance method mainly at the rate of 20% and helicopters and related equipment by the straight line method mainly at the rate of 10% of cost less estimated residual value of 40% of cost. Depreciation amounted to \$1,985,455 (1969—\$1,353,589) and depletion amounted to \$556,138 (1969—\$421,458).

## 5. Accounting Policy for Oil and Gas Properties

Since June 1, 1968 the Company has followed the full cost method of accounting whereby all costs relating to the exploration for and development of oil and gas reserves, including exploration overhead, are capitalized whether productive or unproductive. Depletion is computed on the total of all such costs by the unit of production method based on the total estimated proven reserves of oil and gas.

## 6. Unamortized Deferred Charges

Series A Preferred Share issue expense and long term debt issue expense of \$225,456 at May 31, 1970 is being amortized over a period of ten years and over the terms of the issues, respectively. Other deferred charges of \$116,168 included in the balance at May 31, 1970 are being amortized over periods of from three to five years.

## 7. Long Term Debt

	<u>1970</u>	<u>1969*</u>
Company		
7% Sinking Fund Debentures Series A, due March 1, 1986, redeemable with annual sinking fund instalments of \$158,000 each due 1970 to 1985 inclusive (Authorized—\$4,000,000) . . . . .	\$3,368,000	\$3,519,000
Obligation as participant in Panarctic Oils Ltd., due on a call basis estimated to be payable \$225,876 in fiscal 1971 and balance in fiscal 1972 . . . . .	452,884	150,583
Bank loans at current rate of interest, repayable at the rate of \$12,202 per month, secured mainly by oil and gas producing properties . . . . .	592,592	394,266
Notes payable on equipment purchases with various interest rates, due 1971 to 1974, secured by retention of title . . . . .	373,249	449,025
Note payable in two instalments of \$15,000 each in 1971 and 1972 . . . . .	30,000	—
Other . . . . .	—	51,150
	<u>4,816,725</u>	<u>4,564,024</u>
Subsidiaries		
Bank loans, at current rate of interest, repayable at the rate of \$7,650 per month, secured by parent company (Bow Valley Industries Ltd.) guarantee . . . . .	273,050	195,850
Notes payable on equipment purchases with various interest rates, due 1971 to 1973, secured by retention of title . . . . .	240,250	189,479
7% Debenture, repayable at the rate of \$3,461 per month including interest, secured by a fixed and floating charge on that subsidiary's assets . . . . .	191,939	217,445
Other long term obligations, provisions, mortgages, payable 1971 to 1975, secured by those subsidiaries' lands and buildings . . . . .	101,178	15,082
Equipment rental obligations under lease/option to purchase agreements . . . . .	—	259,397
	<u>806,417</u>	<u>877,253</u>
	5,623,142	5,441,277
Less—Amount due within one year . . . . .	994,610	979,066
	<u>\$4,628,532</u>	<u>\$4,462,211</u>

\*For purposes of comparison the 1969 figures have been restated to give retroactive effect to the fiscal 1970 amalgamation as outlined in Note 9.

The 7% Sinking Fund Debentures Series A are secured by a first floating charge on all the Company's undertaking subject to permitted encumbrances.

The aggregate maturities of long term debt in each of the five years subsequent to May 31, 1970 are as follows:

1971—\$994,610      1972—\$805,681      1973—\$502,977      1974—\$388,055      1975—\$253,217

## 8. Income Taxes

The Company and those subsidiaries which may claim deductions from taxable income for oil and gas lease acquisition, exploration and drilling costs have followed the taxes payable basis of accounting for income taxes to May 31, 1970 and have claimed tax depreciation in amounts which have approximated book depreciation on a cumulative basis. The total taxes payable have been substantially reduced by claiming as allowable deductions all of the lease acquisition, exploration and drilling costs which such companies have accounted for on the basis outlined in Note 5.

The Canadian Institute of Chartered Accountants recommends income tax allocation for all differences in the timing of deductions for tax and accounting purposes. The Company, in common with many other companies in the Canadian oil and gas industry, believes that tax allocation in respect of oil and gas lease acquisition, exploration and drilling costs is not

appropriate and this position is accepted by accounting authorities outside Canada. Accordingly, no provision has been made for deferred income taxes on timing differences involving such costs. If the tax allocation basis had been followed in all cases net income for the year would have been reduced by \$1,300,000 (\$771,880 in 1969). On a cumulative basis deferred income tax credits to May 31, 1970 would have been \$5,700,000 of which \$671,433 has been reflected in the accounts of those subsidiaries which follow the tax allocation basis of accounting for income taxes and which relates mainly to the tax depreciation claimed in excess of book depreciation.

## 9. Share Capital, Share Purchase Warrants and Share Options

The Company is required to expend \$40,000 per year (or such lesser amount as would increase the Fund to \$80,000) as a Series A Preferred Share Purchase Fund for the purchase for redemption or retirement of its 5½% Cumulative Redeemable Preferred Shares Series A, provided such shares are available in the open market for purchase at a price not exceeding their par value plus reasonable costs of acquisition. The Series A Preferred Shares are subject to redemption at any time at \$21 per share. During the fiscal year 2,690 preferred shares were purchased and cancelled and the gain arising on cancellation was credited to contributed surplus.

The 5% Cumulative Redeemable Convertible Second Preference Shares of a par value of \$100 each are convertible at any time prior to April 2, 1979 into common shares at an initial conversion price of \$30 per common share (one preference share for 3⅓ common shares). These shares rank junior to the Series A Preferred Shares and are subject to redemption on or after April 1, 1974 at \$105 per share, plus accumulated unpaid dividends, except that during the period from April 1, 1974 to April 1, 1979 redemptions are subject to deferment under certain conditions. On or before March 31 in each year commencing with the year 1980, the Company is required to set aside as a Sinking Fund an amount equal to 5% of the par value of the Second Preference Shares outstanding at the close of business on April 1, 1979 for the purpose of either redeeming or purchasing the shares.

During the year the previously approved amalgamation agreement, providing for the amalgamation of the Company with Bow Valley Land Co. Ltd., a wholly owned subsidiary, was consummated. The amalgamation did not result in any change in the consolidated financial position of the amalgamated company from that of the Company.

The changes in issued common share capital during the fiscal year are as follows:

	Common shares of no par value	
	Number of shares	Amount
Balance, May 31, 1969 . . . . .	3,185,112	\$8,224,966
Shares issued as part consideration for subsidiaries acquired during the year—		
Wonderly & Kershaw Petrochemical Services Ltd. . . . .	36,000	828,000
Griffith Bros. Drilling Limited . . . . .	4,320	95,040
Shares issued for cash upon exercise of—		
Warrants . . . . .	17,510	82,949
Employee stock options . . . . .	6,400	55,680
Balance, May 31, 1970 . . . . .	<u>3,249,342</u>	<u>\$9,286,635</u>

Of the authorized but unissued common shares 495,461 shares were reserved at May 31, 1970 for the following:

- Outstanding warrants which entitle the holders thereof to purchase 912 common shares of the Company at \$1.875 per share to May 31, 1973 and 26,816 common shares of the Company at \$4.75 per share to July 15, 1970.
- Options granted, or to be granted, as to 114,400 common shares of the Company to officers and employees of the Company and its subsidiaries under the terms of the Company's 1966 Incentive Stock Option Plan.
- 5% Cumulative Redeemable Convertible Second Preference Shares convertible into initially 333,333 common shares of the Company.
- Further consideration with respect to the acquisition of Western Research & Development Ltd. amounting to 20,000 common shares (Note 11).

Details of common shares under option are as follows:

Option price and date of grant	Expiry date	Balance	Fiscal year 1970		Balance
		May 31, 1969	Exercised	Granted	May 31, 1970
\$ 8.55—March 3, 1966	March 3, 1971	48,800	4,400	—	44,400
9.03—December 14, 1967	December 14, 1972	5,000	2,000	—	3,000
10.21—May 29, 1968	May 29, 1973	10,000	—	—	10,000
25.89—May 5, 1969	May 5, 1974	26,825	800 (1)	—	26,025
18.75—September 24, 1969	September 24, 1974	—	—	1,300	1,300
12.83—May 12, 1970	May 12, 1975	—	—	5,150	5,150
		<u>90,625</u>	<u>7,200</u>	<u>6,450</u>	<u>89,875</u>

(1) These 800 options were cancelled during the year.

## 10. Restrictions on Dividends

Under the terms of the Trust Deed for the 7% Sinking Fund Debentures Series A of the Company and the terms of the Series A Preferred Shares, dividends on common shares shall not be declared or paid:

- If after giving effect to such declaration or payment, the aggregate of the consolidated retained earnings and consolidated capital surplus of the Company will be less than \$3,000,000; and

(b) Unless after giving effect to such dividends the amount of the consolidated retained earnings will be at least 125% of the par value of all of the Series A Preferred Shares and all preferred shares ranking in priority thereto or equivalent therewith then issued and outstanding.

At May 31, 1970, approximately \$6,300,000 of consolidated retained earnings was free of these restrictions.

### 11. Contingent Liabilities and Commitments

At May 31, 1970 the Company and/or one or more of its subsidiaries were contingently liable (a) for discounted conditional sales contracts receivable in the amount of \$642,800 and (b) to the extent of \$709,462 representing the liabilities of the co-owner in the joint venture but against which the Company would have a claim upon the co-owner and the interest of the co-owner in the joint venture assets.

On July 3, 1970 a statement of claim for approximately \$770,000 was issued against a subsidiary relating to an accident in July 1969. Company's counsel have advised that the information they have at present indicates that the subsidiary is fully insured with respect to this claim.

Pursuant to the agreement for the purchase of the outstanding shares of Bow Helicopters Ltd. (formerly Bullock Helicopters Ltd.) and the outstanding shares of Atmos Engineering Sales Ltd. additional amounts of \$300,000 in 1972 and \$100,000 in 1974, respectively, will be payable by the Company to the vendors subject to certain conditions being met, including earnings tests for the five-year period ending January 3, 1972 and the four-year period ending May 31, 1974, respectively.

Pursuant to the agreement for the purchase of the outstanding shares of Western Research & Development Ltd. 5,500 common shares of the Company are to be issued to the vendors in 1975 and 4,500 common shares of the Company are to be issued to the vendors in 1980. Subject to certain conditions being met, including earnings tests for periods ending in 1975 and in 1980, a further 10,000 common shares of the Company will be issued to the vendors.

The Company is committed to expend an amount of approximately \$450,000 to 1974 in connection with the development of computer programs.

### 12. Remuneration of Directors and Senior Officers

The aggregate direct remuneration received by the directors and senior officers of the Company amounted to \$210,227 in fiscal 1970 (\$164,152—fiscal 1969).

### 13. Earnings Per Share

Earnings per common share are based on the weighted average number of common shares outstanding and after dividend requirements on Series A Preferred Shares and, in fiscal 1970, Second Preference Shares.

No material dilution of earnings per common share would result assuming, at the beginning of the year, conversion of Second Preference Shares, the exercise of outstanding warrants and stock options and the investment of funds therefrom at a 7.5% rate of return (\$75,000 before deferred income taxes) and the issuance of additional shares as outlined in Note 11.

No material change would result in the earnings per share, nor would any material dilution result, if the method of calculation were that followed in the United States.

### 14. Subsequent Event

Included in cash is \$4,976,179 (U.S.) invested in United States dollar deposit receipts which, for the purposes of the May 31, 1970 accounts, were converted to Canadian dollars at 1.07<sup>3</sup>/<sub>8</sub>, the exchange rate at May 31, 1970. The subsequent unpegging of the exchange rate of the Canadian dollar resulted in a varying exchange rate which, to July 10, 1970 was lower than the rate at May 31, 1970. Although the Company has not converted any of the U.S. deposit receipts to Canadian dollars the following table illustrates the effect of the varying exchange rate on the U.S. dollar deposit receipts:

	Rate	Canadian equivalent
On May 31, 1970 . . . . .	1.07 <sup>3</sup> / <sub>8</sub>	\$5,343,172
On July 10, 1970 . . . . .	1.03 <sup>17</sup> / <sub>32</sub>	5,153,393
Range during period		
High . . . . .	1.04 <sup>21</sup> / <sub>32</sub>	5,207,882
Low . . . . .	1.03	5,125,464

## AUDITORS' REPORT

To the Shareholders of  
BOW VALLEY INDUSTRIES LTD.

We have examined the consolidated balance sheet of Bow Valley Industries Ltd. and subsidiary companies as at May 31, 1970 and the consolidated statements of income, retained earnings and source and application of funds for the year then ended. Our examination was made in conformity with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion these consolidated financial statements present fairly the financial position of the companies as at May 31, 1970 and the results of their operations and the source and application of their funds for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

CALGARY, Alberta  
July 10, 1970

PRICE WATERHOUSE & CO.  
Chartered Accountants

**TEN YEAR FINANCIAL SUMMARY**

(as restated for 1967 and prior years to reflect 1968 poolings of interest)

	1970	1969	1968
Gross income . . . . .	\$44,139,209	34,253,364	28,071,784
Depreciation and depletion . . . . .	2,541,593	1,775,047	1,673,784
Income before extraordinary items . . . . .	2,365,488	1,552,672	864,706
Extraordinary items . . . . .	—	251,119	400,068
<b>Net income</b> . . . . .	<b>2,365,488</b>	<b>1,803,791</b>	<b>1,264,774</b>
Shares outstanding at year-end — (2)			
Common . . . . .	3,249,342	3,185,112	2,982,894
Preferred, Series A . . . . .	90,290	92,980	94,980
Second Preference . . . . .	100,000	100,000	—
<b>Per common share</b> — (1) and (2)			
Cash flow . . . . .	\$ 1.42	1.14	1.29
Income before extraordinary items . . . . .	.55	.47	.31
Extraordinary items . . . . .	—	.08	.16
Net income . . . . .	.55	.55	.47
Dividends per share — (2)			
Common . . . . .	\$ .10	.10	.10
Preferred, Series A . . . . .	1.10	1.10	1.10
Second Preference . . . . .	5.00	—	—

**Nine Year Financial Summary**

(as previously reported in Bow Valley annual reports)

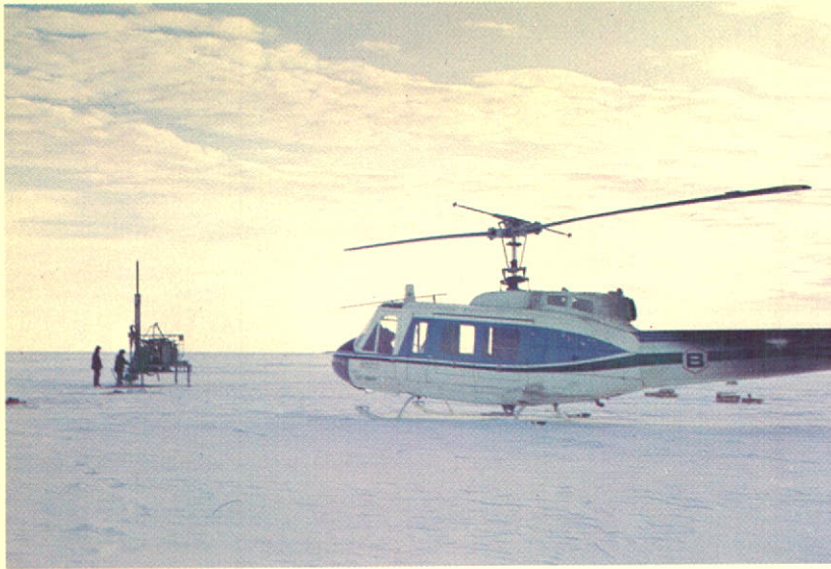
Gross income . . . . .	\$ —	34,253,364	28,071,784
Depreciation and depletion . . . . .	\$ —	1,775,047	1,673,784
<b>Net income</b> . . . . .	<b>\$ —</b>	<b>1,803,791</b>	<b>1,264,774</b>
<b>Per common share</b> — (2)			
Cash flow . . . . .	\$ —	1.14	1.29
Net income . . . . .	\$ —	.55	.47

(1) Based on the average number of common shares outstanding during the respective years and after dividend requirements on Series A Preferred Shares and Second Preference Shares.

(2) Shares outstanding and all per share figures have been adjusted to give effect to the four-for-one stock split in March 1963 and the two-for-one stock split in October 1967.



1967	1966	1965	1964	1963	1962	1961
4,487,750	21,463,440	13,934,063	10,270,664	8,269,537	6,422,435	6,236,103
1,576,665	1,106,607	765,315	589,722	543,197	441,894	405,183
1,352,439	1,439,603	958,798	674,480	540,107	419,498	324,623
239,499	220,673	—	—	—	—	—
1,591,938	1,660,276	958,798	674,480	540,107	419,498	324,623
2,148,894	2,148,726	1,985,200	1,760,000	1,720,000	1,600,000	1,600,000
97,480	99,580	—	—	—	—	—
—	—	—	—	—	—	—
1.49	1.37	.86	.70	.65	.50	.44
.52	.60	.45	.35	.29	.23	.18
.10	.10	—	—	—	—	—
.62	.70	.45	.35	.29	.23	.18
.09	.09	.08	.08	.07	.06	.10
1.10	.87½	—	—	—	—	—
—	—	—	—	—	—	—
0,433,962	18,716,102	12,183,845	9,316,636	7,137,454	5,282,649	4,955,636
1,410,158	1,016,751	714,440	556,049	501,829	397,326	359,967
1,211,546	1,300,137	876,337	637,436	501,923	387,786	319,723
1.31	1.19	.85	.73	.66	.53	.47
.52	.57	.44	.36	.29	.24	.20



Bow Helicopters Ltd. and Sedco Drilling performing seismic work in the Arctic Islands.



Midnight sun silhouettes an arctic tern in flight.



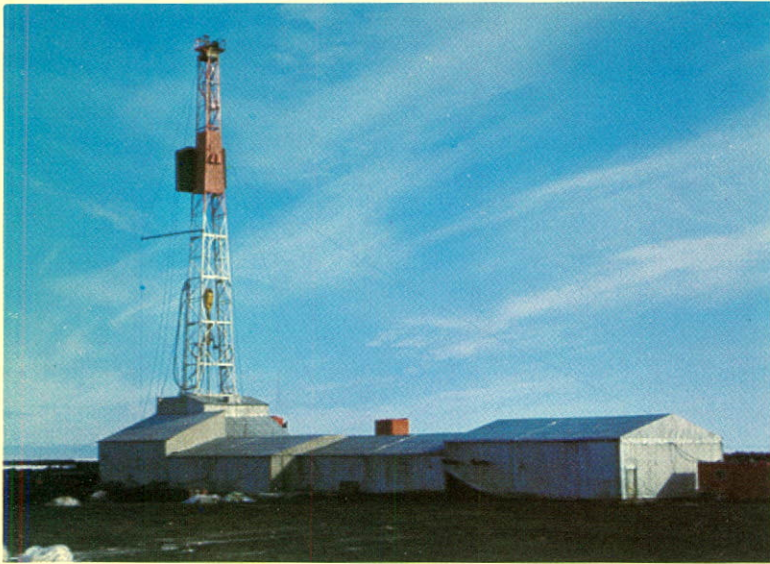
A Bow Helicopters machine lifts a portable seismic rig for Panarctic Oils Ltd.



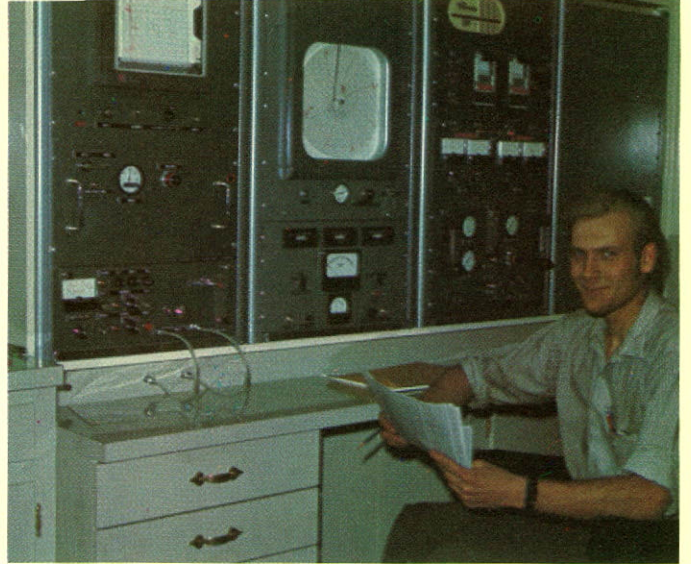
Commonwealth - Hi-Tower Rig No. 1 at Panarctic Homestead Hecla J-60.



Hercules aircraft takes off from Rea Point, Melville Island.



Summer view of Commonwealth - Hi-Tower Rig No. 1 at Panarctic Homestead Hecla J-60.



Radio operator and equipment at Rea Point, Melville Island.



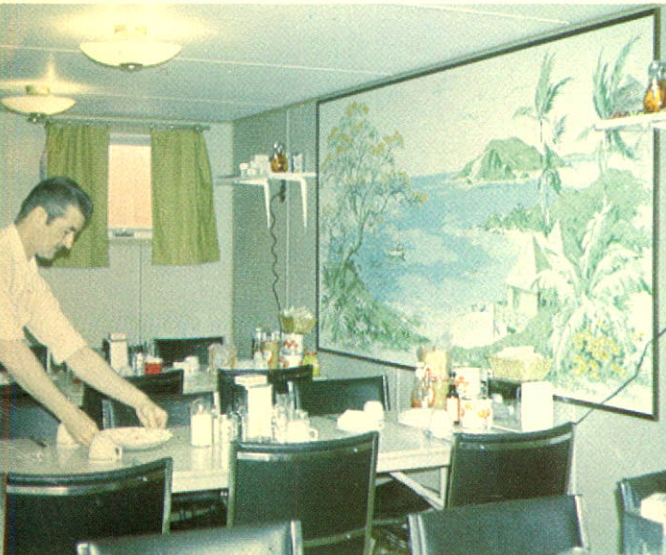
Derrick, Commonwealth - Hi-Tower Rig No. 1.



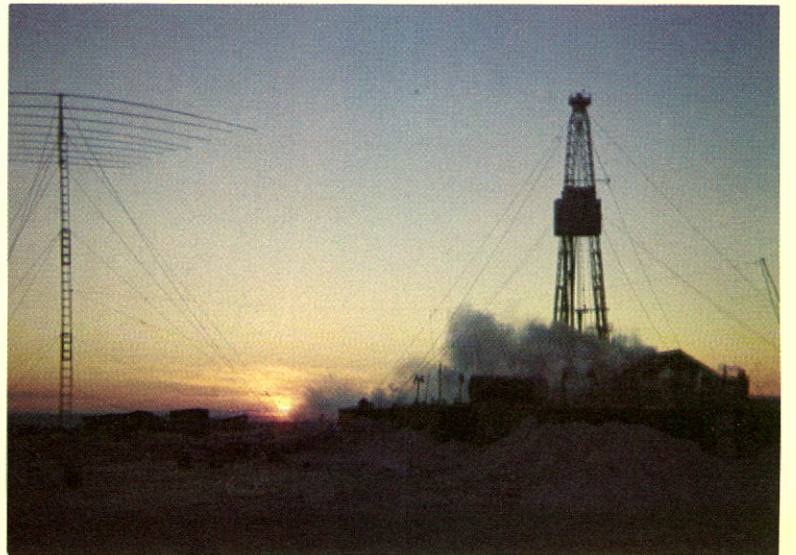
Weather station at Rea Point, Melville Island.



Radio antenna in the winter sun at mid-day, Drake Point, Melville Island.



Dining room with its tropical mural at Commonwealth - Hi-Tower Rig No. 2 camp.



Commonwealth - Hi-Tower Rig No. 3 at Panarctic Hoodoo Dome F-27.



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