Bow Valley Industries Ltd. 1973 Annual Report





Officers

DARYL K. SEAMAN, President
BYRON J. SEAMAN, Senior Vice-President
HENRY C. VAN RENSSELAER, Vice-President, Finance
J. RICHARD HARRIS, Vice-President, Exploration
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
H. DONALD BINNEY, Vice-President, Bow Valley Industries Ltd., Calgary
J. RICHARD HARRIS, Vice-President, Exploration, Bow Valley Industries Ltd., Calgary
WILLIAM A. HOWARD, Q.C., Barrister and Solicitor, Calgary
WILLIAM S. HULTON, C.A., Financial Consultant, Vancouver
JAMES S. PALMER, Barrister and Solicitor, Calgary, Alberta
DARYL K. SEAMAN, President, Bow Valley Industries Ltd., Calgary
BYRON J. SEAMAN, Senior Vice-President, Bow Valley Industries Ltd., Calgary
DONALD R. SEAMAN, Vice-President, Bow Valley Industries Ltd., Calgary
D'ALTON L. SINCLAIR, Financial Consultant, Toronto
HENRY C. VAN RENSSELAER, Vice-President, Finance, Bow Valley Industries Ltd., Calgary

Head Office

630 - 6th Avenue South West, Calgary, Alberta, Canada

Overseas Office

BOW VALLEY EXPLORATION (U.K.) LTD. 26 St. James's Street London SW1A 1HA, England

Transfer Agents

Common Stock

GUARANTY TRUST COMPANY OF CANADA, Calgary, Toronto, and Vancouver THE BANK OF NEW YORK, New York

Preferred Stock, Series A

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

Registrars

Common Stock

GUARANTY TRUST COMPANY OF CANADA, Calgary, Toronto, and Vancouver SCHRODER TRUST COMPANY, New York

Preferred Stock, Series A

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

Auditors

PRICE WATERHOUSE & CO., Calgary

Legal Counsel

HOWARD, MOORE, DIXON, MACKIE & FORSYTH, Calgary BURNET, DUCKWORTH & PALMER, Calgary PAUL, WEISS, RIFKIND, WHARTON & GARRISON, New York

Bankers

THE ROYAL BANK OF CANADA, Calgary

Summary of Earnings

	1973	1972 (restated)
Gross income	\$61,721,541	\$48,192,977
Depreciation and depletion	\$ 4,677,937	\$ 3,756,960
Income before extraordinary items	\$ 1,882,910	\$ 1,013,958
Extraordinary items	\$ 66,100	\$ 449,514
Net income	\$ 1,949,010	\$ 1,463,472
Shares outstanding at year end	4,766,396	4,753,064
Cash flow (after preferred and preference dividends)	\$ 6,010,093	\$ 4,585,968
Cash flow per common share*	\$ 1.26	\$.98
Net income per common share *	\$.28	\$.19

Based on the weighted average number of shares outstanding during the respective years (1973 — 4,759,683;
 1972 — 4,694,731) and after dividend requirements on series A preferred shares and second preference shares.



On-ice seismic operations last winter on Bow Valley's Mackenzie Delta acreage.

Annual General Meeting

The 1973 Annual General Meeting of the shareholders of Bow Valley Industries Ltd. will be held in the Lakeview Room of the Calgary Inn at 10:00 a.m. September 25, 1973, Calgary, Alberta, Canada.



D. K. Seaman, President, meeting with the Audit Committee and the Company's auditor. Left to Right: W. Fay Anderson, Partner, Price Waterhouse & Co., F. J. Ahern, D. K. Seaman, D. L. Sinclair, W. A. Howard and W. S. Hulton.

President's Message

Fiscal 1973 saw a continuation of the improvement which took place in sales and earnings in the preceding year. Gross income increased to \$61,721,541 versus \$48,192,977 last year, while income before extraordinary items amounted to \$1,882,910, compared to \$1,013,958. Cash flow after preferred and preference dividends rose to \$6,010,093, or \$1.26 per common share, in the latest year from \$4,585,968, or \$0.98 a share, as restated, in the preceding year. Net income was \$1,949,010, or \$0.28 a share, compared to \$1,463,472, or \$0.19 a share.

During the 1972/1973 winter season, Bow Valley and its partner in the Mackenzie Delta expended \$1,691,660 in conducting an extensive seismic program, both onshore and through the ice, over the company's land holdings. In addition to Bow Valley's own shooting, arrangements were made to acquire additional seismic shot by other companies in the area through an exchange of data. The seismic interpretation, which should be completed by late August, will place Bow Valley in a better position to determine the extent of the work program considered desirable for the property and will enable Bow Valley to renew the discussions with industry suspended last fall. A summation of last winter's drilling activities in the Mackenzie Delta by other operators is contained in the Exploration section of this report.

During the year, Bow Valley increased its interest in the Mackenzie Delta acreage by acquiring all the outstanding shares of Christopher Explorations Ltd., a private

company, in exchange for 86,125 common shares of Bow Valley. As a result of the acquisition, Bow Valley's interest in the acreage before payout increased from 45% to 50% and after payout from 47% to 50%.

The North Sea has become an area of heightened interest to Bow Valley in view of its participation in the Heimdal discovery made during the summer of 1972 on Block 25/4 in the Norwegian Sector. A second well on Block 25/4 is scheduled to spud in September 1973. The new test will be located about three and one-half miles from the original discovery and will serve to provide a further indication of the extent of reserves in the Block.

Bow Valley and its industry partners have made arrangements to drill two wells during the summer of 1974 on Block 16/7 in the U.K. sector of the North Sea using the Odin Drill, a semisubmersible in which Bow Valley has a 20% interest, now under construction in Norway.

A well was spudded on August 4, 1973, in Consession N offshore Abu Dhabi. Bow Valley has a 20% interest in this venture.

The contract drilling business in Canada showed marked improvement during the year under review and the outlook continues to appear favourable for this business in fiscal 1974. The strength in contract drilling has created a better climate for the oilfield equipment and supply business in which Bow Valley has an active interest.

Management is now actively engaged in planning the extension of Bow Valley's service activities to overseas areas and this concept will receive high priority in fiscal 1974. The wide range of Bow Valley's service activities, coupled with the company's exploration capabilities and the fact that Bow Valley is a Canadian company, present interesting possibilities for international business. Approximately 45% of Bow Valley's oil and gas exploration and development budget is scheduled for expenditure outside of Canada in fiscal 1974. Bow Valley either holds oil and gas exploration rights in, or is currently involved in negotiations with, seventeen foreign countries. The opportunities in the industry are such that it is a logical progression for Bow Valley's service activities also to become more international.

The manufacturing activities of your company enjoyed a growing business in fiscal 1973. Plant expansions are programmed, the details of which are covered elsewhere in the report.

In addition to its office in London, England, Bow Valley has made arrangements to open an office in Jakarta, Indonesia, to supervise the company's growing activities in Southeast Asia.

I wish to express my appreciation, and at the same time convey the appreciation of the Board of Directors, to all the employees of the company whose efforts have made possible the improved performance achieved in 1973.

D. K. Seaman, President.

August 20, 1973.

Summary of Oil and Gas Activity

Exploration

MACKENZIE DELTA

In the Mackenzie Delta, several discoveries of oil and gas were made during the 1972-1973 drilling season. Shell Canada Limited announced two discoveries. The Niglintgak H-30, four miles southeast of Bow Valley's Permit W-949, is a "significant discovery". On the basis of log evaluation and two drill-stem tests, ten sandstone zones are indicated to be gas bearing. Total depth of the well is 7,817 feet. The rig was moved to Kumak C-58, a four-mile southeast stepout on the same geological structure. On July 31, 1973, this test was drilling at 6,348 feet. The Kugpik O-13, 20 miles southeast of Bow Valley's permits,



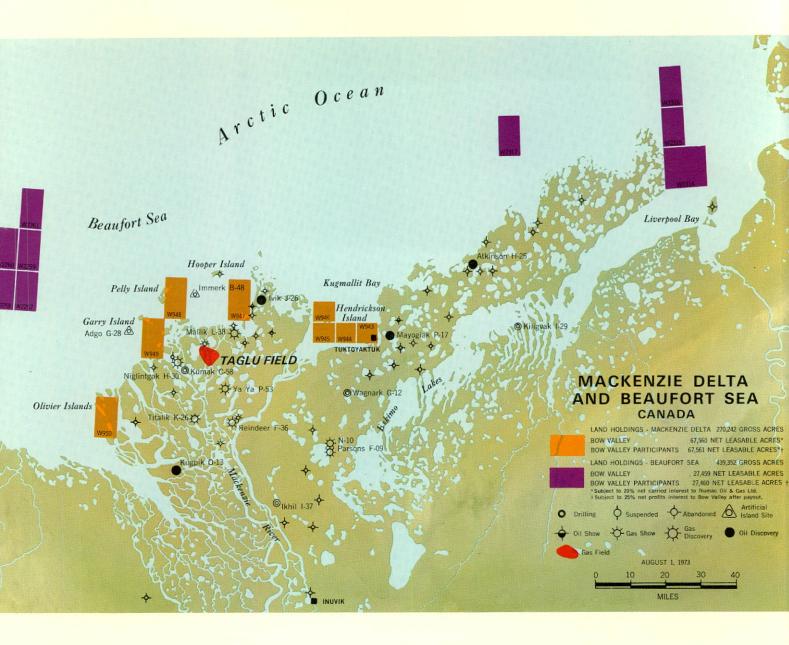
Seismic operations last winter on Pelly Island in the Mackenzie Delta.

flowed oil and gas to surface on a drill-stem test below 7,200 feet at undetermined rates. On July 31, 1973, this test was drilling at 10,282 feet towards a 13,500-foot projected depth.

Gulf Oil Canada Limited, as operator for a group including Shell and Imperial Oil Limited, announced two discoveries. The Titalik K-26 was reported as a gas discovery. while the Reindeer F-36 suffered a gas explosion and fire at 2,980 feet which was subsequently brought under control. These wells are 20 and 27 miles, respectively, from Bow Valley's permits. Gulf also announced, as operator for a group including Mobil Oil Canada Ltd., that the Yaya P-53 flowed gas to surface from three tests conducted between 7,000 and 8,000 feet. This team also announced confirmation of last year's Parsons F-09 gas discovery, when the N-10, 11/2 miles north, flowed gas to surface from five separate zones between 8,600 and 9,500 feet at rates between 3 and 37 million cubic feet per day with small amounts of condensate.

Imperial announced that oil and gas flows were obtained from several sands below 8,100 feet in the Ivik J-26, 3½ miles east of Bow Valley's Permit W-947. Imperial later announced that the Ivik K-54 test, approximately 2,150 feet east of Bow Valley's Permit W-947 and on a prospect separate from the previous Ivik well, was abandoned at 10,339 feet after testing medium-gravity oil from a reservoir "unlikely to be commercial". Below this zone, a series of thin multiple sandstones containing gas and water at abnormally high pressure caused cessation of drilling prior to reaching the projected total depth of 15,000 feet.

Two other wells in close proximity to Bow Valley's holdings are the Imperial Langley E-29, abandoned at 12,499 feet, two miles south of Bow Valley's permits, and the Chevron Upluk C-21, presently suspended at 5,371 feet, one mile northwest of Shell's Niglintgak gas discovery and 3½ miles east of Bow Valley's permits. Imperial is drilling a deeper-pool test to 16,000 feet in the Taglu area, 10 miles south of Bow Valley's permits, and is drilling at Wagnark G-12, 15 miles south of Bow Valley's permits. Earlier drilling during the winter season resulted in all of Imperial's

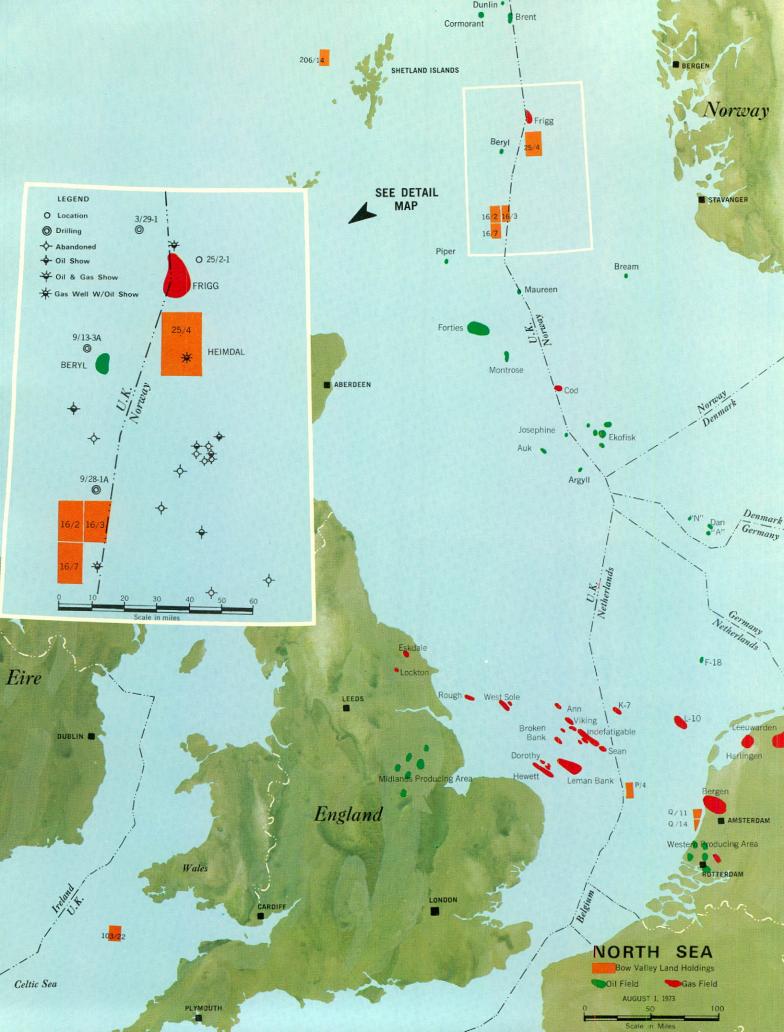


first-round tests being abandoned: Ivik C-52 near the boundary of Bow Valley's Permit W-947; Mallik P-59, 2 miles northwest of the Mallik gas discovery; Ivik N-17, 1½ miles northeast of the Ivik J-26 oil discovery; Nuktak C-22 on Hooper Island, 3 miles northwest of Permit W-947; and Umiak J-37, 5 miles southeast of the same permit.

Imperial's artificial island, on which a wellsite has been licenced as Immerk B-48, was successfully constructed during the summer of 1972. Although some damage was sustained due to late season storms, it appears that, with the addition of further dredged material and wave protection devices, the island will be ready for drilling operations later in 1973. The evaluation of artificial-island drilling techniques and

other methods of offshore drilling are important to Bow Valley because of similar shallow-water conditions which exist over much of its permit lands.

During the past winter, the recently developed techniques of gathering on-ice seismic data were successfully applied to the acquisition of 584 miles of data across, and adjacent to, Bow Valley's Delta holdings. Bow Valley also participated in the acquisition of 200 miles of non-exclusive seismic shooting and is trading for several hundred more miles of data with nearby operators in order to obtain sufficient coverage to adequately evaluate its permits.



In total, 1,200 miles of new data are expected to be available for interpretation of subsurface structures in the area. Some of the seismic work which Bow Valley carried out last winter was done on islands of a sensitive ecological nature where special measures were required, including the gathering of scientific data for academic and government groups. A high level of cooperation with government regulatory officials resulted in satisfactory completion of data gathering with minimal disturbance to the terrain.

The continued discovery of hydrocarbons in the Mackenzie Delta has resulted in increased activity, particularly in the north-central part of the Delta. It appears likely that at least 12 drilling rigs will be active again next winter. W. P. Wilder, Chairman of Canadian Arctic Gas Study Ltd., in a recent statement, indicated that his company intends to file with the various regulatory bodies, before the end of 1973, applications for a large diameter pipeline to deliver natural gas from the Delta to energy markets in Canada and the Unites States.

As announced on November 16, 1972, Bow Valley and its partner in the Mackenzie Delta decided not to accept any of the industry proposals submitted for exploration of their Delta acreage. The geophysical program described above was conducted over the property to assist in determining future policy for the exploration of the lands. It is anticipated that interpretation of the data will be completed by late August 1973.

NORTH SEA/CELTIC SEA

At May 31, 1973, Bow Valley held interests in nine blocks offshore from Norway, the United Kingdom, and the Netherlands which totalled 493,041 gross acres, equivalent to 90,997 net acres.

In the **Norwegian** sector of the North Sea, the 25/4-1X reached total depth of 11,555 feet in October 1972. The Norwegian Ministry released the following statement on December 5, 1972:

"The Norwegian Ministry of Industry announced today that the Pan Ocean/Petronord group has completed testing

of the Heimdal well in Block 25/4 of the Norwegian sector of the North Sea. Gas flow from an upper reservoir was at the rate of 956,000 cubic meters per day (33.8 million cubic feet per day), along with 87 cubic meters per day (545 barrels per day) of condensate.

Oil and gas and water were also recovered from tests carried out in separate deeper reservoirs.

Further evaluation, including analysis of results of the well and of a recently completed detailed seismic survey, will be necessary to determine the potential of the various reservoirs. Additional drilling is scheduled for 1973 on Block 25/4."

The 25/4-1X discovery is 18 miles south of the large Frigg gas field discovered by the Petronord group in 1971. A 375-mile marine seismic program has been conducted over Block 25/4 since the discovery, and a second well, with a projected depth of 8,850 feet, is scheduled to spud in September 1973. Bow Valley presently holds a 13 1/3 percent working interest in the block which is reducible to an 8 percent interest if the Norwegian Government elects to subscribe to its full 40 percent carried working interest.

Bow Valley is presently completing a report for the Norwegian Ministry setting forth all of the necessary requirements for bidding on certain additional offshore blocks offered by the Ministry on July 11, 1973. The deadline for applications is September 17, 1973, and no announcement as to the successful applicants is expected before early 1974.

Marine seismic surveys have indicated the presence of anomalies on all five blocks held by Bow Valley and its various industry partners offshore from the **United Kingdom**. A well, originally scheduled to be drilled on Block 16/7 during the summer of 1973, was postponed due to the lack of suitable rigs and will be one of two wells scheduled to be drilled on Block 16/7 during the summer of 1974 using the Odin Drill semisubmersible. This rig, owned 20 percent by Bow Valley, is expected to be commissioned in early 1974.

Summary of Exploratory Acreage as of May 31, 1973

					Type of In	terest			
				Interest (1)	Royalty Ir	Royalty Interest (2) Other I		Interests (3)	
	ation	Type of Ownership	Gross Acres	Net Acres	Gross Acres	Net Acres	Gross Acres	Net Acres	
	CANADA								
1.	Alberta	Leases	1,052,411	606,733	330,761	7,058	335,320	18,059	
		Petroleum and Natural Gas						Carrie Land	
		Reservations	636,180	316.298	3,520	176	53,760	3,360	
		Petroleum and Natural Gas Permits	7,720	3,880				-	
		Drilling Reservations	36,310	36,310			22,400	1,120	
		Natural Gas Licences	24,160	7,300				8-54 ·	
2.	Atlantic East								
	Coast	Exploratory Permits	2.149,699	247,751*	1,603,867	10,692*	177,818	2.667	
3.	Arctic Islands	Exploratory Permits (4)	2,175,465	240,860*	907,430	8,205*		72,401	
4.	Beaufort Sea	Exploratory Permits	439,352	27,459*			439,352	6,864	
5.	British Columbia	Leases	45,388	31,392			39,350	6,688	
6.	Hudson Bay	Exploratory Permits			898,431	8,984*			
7.	Hudson Strait	Exploratory Permits	30,676	5,368*				Manufacture -	
8	Mackenzie Delta	Exploratory Permits	270,242	67,560*	_		270.242	16,890	
9.	Saskatchewan	Leases	26,354	13,520	3,093	154	11.653	386	
		Petroleum and Natural Gas Permits	63,520	25,408					
10	Yukon-Northwes			25,100					
	Territories	Exploratory Permits	96,404	24.101	270.474	2.405			
		TOTAL CANADA	7,053,881	1.653,940	4,017,576	37.674	1,921,187	128,435	
В.	FOREIGN								
1.	Abu Dhabi	Concession Areas	778,381	155,676				-	
2.	Indonesia	Petroleum Sharing Contract Area Technical Assistance Contract	11,645,468	1.455,684					
		Areas	67,753	27,101					
3.	Italy	Exploration Permits	205,256	15,020	95,138	423			
4.	Maldive Islands	Petroleum Exploration Licence	14,764,800	645,960				-	
5.	Netherlands	Exploration Licences	86,016	7,064					
6.	Norway	Production Licence	129,480	17,264					
7.	South Africa	Prospecting Lease	6.890,240	817,871					
8.	Tunisia	Permit	185,774	61,925					
9.	United Kingdom	Production Licences	277,545	66,669					
		TOTAL FOREIGN	35.030.713	3.270.234	95,138	423		-	
		TOTAL WORLD	42.084.594	4.924,174	4.112,714	38,097	1,921,187	128,435	

- (1) Gross acres represent the total of the acreage in which the company has varying working interests. Net acres represent the company's interest in the gross acres.
- (2) Gross acres represent the total of the acreage in which the company has varying royalty interests. Net acres represent the company's interest in the gross acres.
- (3) Gross acres represent the total of the acreage in which the company has varying net profit and reversionary interests. Net acres represent the company's interest in the gross acres.
- (4) Excluding acreage owned by Panarctic Oils Ltd. As of March 31, 1973, Panarctic held working interests in 78,440,497 gross acres and 45,950,755 net acres. Bow Valley holds a 2.24 percent interest in Panarctic.
- These figures have been adjusted by a reduction of 50 percent to reflect the revocation of Oil and Gas Land Order 1-1961 effective April 15, 1970.

Bow Valley/Acres/Santa Fe supply operations at Resolute Bay, in the Arctic Islands, last September.



In December 1972, the Dutch Government awarded Bow Valley, in participation with other companies, Block P/4 in the North Sea offshore from the **Netherlands**. A marine seismic program has since been conducted over the block, and interpretation of the data should be completed in late 1973. Seismic surveys previously conducted over Bow Valley's Blocks Q/11 and Q/14 have been completed. Negotiations are now underway with partners regarding the drilling of a second well on Block Q/11. Bow Valley participated in the drilling of the first well on Block Q/11 in late 1969 which, although abandoned, tested gas in the Bunter sand.

In late 1972, Bow Valley joined a group of other companies in a joint venture formed for the purpose of applying for offshore acreage in the **Republic of Ireland**. Although no firm date has yet been established by the Irish Government for the tendering of bids, Bow Valley and its partners have acquired in excess of 1,000 miles of marine seismic data over the area of interest, and the Group's bidding strategy is now being formulated.

ARCTIC ISLANDS

Further exploration successes were achieved in the 1973 fiscal year by Panarctic Oils Ltd., owned 2.24 percent by Bow Valley. In November 1972, Panarctic announced that the Tenneco et al POR Hecla F-62, on the west side of the Sabine Peninsula on Melville Island, discovered a gas field similar to Drake Point, 30 miles to the east. A later well, the I-69, extended production three miles south. This well was drilled directionally from the coast to contact the reservoir offshore at a favorable elevation. The Thor H-28 resulted in a gas discovery when it also was drilled directionally to a target under the sea. The well encountered the Heiberg sand higher than in the previously drilled Thor O-38 on Thor Island which reported an oil show last vear. The Drake B-44 extended gas production in the Drake Point field 11 miles east of the original discovery. On July 31, 1973, the Drake D-68 was drilling at 7,445 feet to test deeper possibilities in this field. Projected total depth of the well is 18,000 feet.



Hi-Tower's new 20,000 foot Hercules Transportable Rig, Delta #1 at work on Hooper Island in the Mackenzie Delta.

Dome Petroleum Limited made two gas discoveries on King Christian Island where Panarctic previously established gas production in two earlier wells. Dome Wallis K-62 found 400 feet of gross gas pay in three zones between 6,418 and 8,276 feet. The Sutherland 0-23, testing a separate structure, has been suspended over the summer at a depth of 4,780 feet. On June 14, 1973, Dome announced that this well encountered three zones containing gas prior to drilling into a high-pressure water zone which was separate from and deeper than the gas zones. In addition to its Panarctic interests on the east half of King Christian Island, Bow Valley has a small royalty interest in a permit 21/2 miles southwest of the Wallis discovery and 5 miles northwest of the Sutherland well.

WESTERN CANADA

Bow Valley drilled 66 wells in Western Canada during the 1973 fiscal year including 59 wells in Alberta, which continues to be one of Bow Valley's prime areas of activity. In the Lyle Lake-Calling Lake area of northeastern Alberta, Bow Valley participated in the drilling of 27 wells, of which 20 were completed as gas wells, bringing to 48 the total number of shut-in gas wells now completed in the area and available for market. At May 31, 1973, the company held an approximate 40 percent interest in 490,000 gross acres in the general area. In view of rising exploration costs and the increasing demand for natural gas, Bow Valley is optimistic that higher prices will be obtained shortly and that its uncommitted gas reserves will be contracted to market at an early date. In the Airdrie area of south-central Alberta, Bow Valley participated in the drilling of a significant Mississippian gas discovery which flowed gas at a rate of 15.5 million cubic feet per day and condensate at a rate of 237 barrels per day. A confirmation well, drilled one mile north of the discovery well, flowed gas at a rate of 4.3 million cubic feet per day and condensate at a rate of 76 barrels per day. Both wells have been

capped awaiting connection to market. A small seismic program has subsequently been conducted over the area, and further drilling will be undertaken following the interpretation and review of the data. Additional acreage was acquired at a recent Crown sale and Bow Valley presently holds an average 54 percent interest in 5,280 gross acres which are only five miles from a large pipeline.

In the Rapdan area of **Saskatchewan**, Bow Valley participated in the drilling of four confirmation wells to a discovery made late in the 1972 fiscal year. All but one of the wells were completed as oil wells. Bow Valley holds a net 44 percent working interest in the successful wells which have now been connected to market and are producing at a combined average rate of 250 barrels per day.

ATLANTIC EAST COAST

Mobil and Texas Eastern Transmission Corporation discovered gas in five zones in their Thebaud P-48 offshore test six miles southwest of their Sable Island discovery, which is 60 miles west of Bow Valley's nearest East Coast acreage. Mobil and Texas Eastern are continuing to drill further tests from a platform at their Sable Island gas and oil discovery. Shell drilled three additional evaluation tests

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Production Summary						
Fiscal year ended	May 31st,					
	1973	1972	1971			
Crude oil (barrels) .	645,392	657,389	697,002			
Natural gas liquids						
(barrels)	28,396	31,738	33,952			
Natural gas (Mcf)	5,432,800	5,110,090	4.624.101			
(Note: The above figures are net after royalty and in-						
clude Bow Valley's net profits interest.)						



Hi-Tower Rig 23 on location.

offsetting the Primrose discovery, six miles from Bow Valley's permits. Joint seismic data, acquired during the year over Bow Valley's holdings, is being evaluated to determine future program requirements. Some selective surrenders and dispositions of lands have been made.

ABU DHABI

A total of 1,626 miles of additional marine seismic have been shot over Bow Valley's Concession N in the Arabian Gulf. Following a review of the interpreted data,

a decision was reached to drill a second well on this block. The jack-up rig "Gusto" was contracted for the drilling of the well which spudded on August 4, 1973, with a projected depth of 12,500 feet. Under the terms of the 1970 Concession Agreement, Bow Valley and its partners relinquished 25 per cent of the original concession area on June 6, 1973. Bow Valley holds a 20 percent interest in the lands.

INDONESIA

Under an agreement signed in 1971 by Marathon Oil Company and a Bow Valley group, two wells were drilled by Marathon on the Mentawai block off the southwest coast of Sumatra during 1972. Both wells were dry and abandoned. Marathon subsequently elected not to exercise certain remaining options and earned no interest in the block. In early 1973, Bow Valley and its partners agreed to continue exploration on the acreage and flew a 2,500-mile magnetic survey. Based on the results, the Bow Valley group has agreed to undertake additional onshore seismic surveys and to drill two stratigraphic tests prior to the end of calendar 1973. The group will then decide whether to commit to the 1974 work program or relinquish the block in which Bow Valley holds a 121/2% interest.

In early 1972, Oceanic Exploration Company entered into an agreement with Bow Valley and its partners under which Oceanic had an option to drill five wells to earn a 50 percent interest in the Karimata contract area off the east coast of Sumatra. Three wells were drilled under this agreement in late 1972. All were abandoned after failing to encounter oil or gas. Oceanic elected not to proceed with the drilling of the final two wells, and earned no interest in the lands. Fifty miles of additional marine seismic were completed during early 1973. Following a review of the data, the Bow Valley group elected to relinquish the block.



Rigging up.

On January 27, 1973, Bow Valley received approval from Pertamina to an assignment of a 60 percent interest in its Suban Jerigi property to another Canadian company and its partners. A 185-mile seismic and gravity program, completed in March 1973, was encouraging, and an initial two-well exploratory drilling program will commence on the property in November 1973.

TUNISIA

Bow Valley and its partners completed 300 miles of marine seismic over the Kuriate concession in the Gulf of Hammamet off the eastern coast of Tunisia during the 1973 fiscal year. A review of the data shows the presence of interesting anomalies, and a well may be drilled on the property during the coming year if a suitable rig can be obtained. Bow Valley holds a 33 1/3 percent interest in the concession.

ITALY

Bow Valley and its partners have relinquished all but three of the original permit areas held in the Adriatic Sea off the eastern coast of Italy. Plans to drill a well on Block BR112-OP, owned 10 percent by Bow Valley, have been delayed due to a temporary restriction on offshore drilling recently imposed by the Italian Government. Bow Valley also holds a five percent interest in two blocks in the western waters offshore Sicily. A 200-mile marine seismic program has been completed, and interpretation of the data was finished in July 1973 and is under review.

MALDIVE ISLANDS

A four-company group has taken a 60 percent interest in the Maldivian concession off the southwestern coast of India and has paid a bonus of \$250,000 to the original group and agreed to spend \$750,000 on marine seismic surveys. The assignment of interest has been approved by the Maldivian Government. Bow Valley retains a 4.375 percent interest in the property and has received its share of the bonus. The seismic program has been completed and is under review.

VIETNAM

On July 14, 1973, the National Petroleum Board announced that Bow Valley and its industry partners had been awarded two concession areas in the offshore extensions of the Republic of Vietnam. Bow Valley holds a 25 percent interest in the two concessions and is to become operator of the venture following execution of the formal concession documents. A 2,000-mile marine seismic program is planned for the area in late 1973.

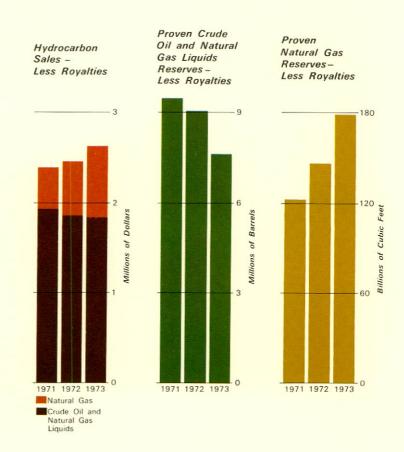
Operations

All oil and gas production during fiscal 1973 was derived from properties within Canada. Net crude oil production after royalties for the 1973 fiscal year amounted to 645,392 barrels (1,768 barrels per day) or two percent lower than the 657,389 barrels (1,796 barrels per day) produced during the same period one year earlier. Net natural gas production after royalties for the year amounted to 5.43 billion cubic feet (14.88 million cubic feet per day) or about six percent higher than the 5.11 billion cubic feet (13.96 million cubic feet per day) produced during 1972. Net production of natural gas liquids after royalties amounted to 28,396 barrels (78 barrels per day) representing an eleven percent decrease over the 31,738 barrels (87 barrels per day) produced last year. Although the production of crude oil and natural gas liquids was lower than the volume produced one year earlier, net oil and gas sales after royalties exceeded the record levels attained last year. These increases were due primarily to higher crude oil and natural gas prices and to the additional volumes of gas sold from the Whitefish Lake field which only produced for a portion of the 1972 fiscal year. Three Alberta crude oil increases totalling 55¢ per barrel occurred during fiscal 1973. The third increase of 25¢ per barrel on May 1, 1973, will not be fully reflected in the accounts until the 1974 fiscal year. In early August 1973 a further price increase amounting to 40¢ per barrel took place.

Bow Valley has renegotiated the price terms of the fuel contract covering gas production from its Tweedie field in northeastern Alberta which supplies the Great Canadian Oil Sands plant at Fort McMurray. The new contract, which became effective on July 1, 1973, provides for a price increase from 9.75¢ per Mcf to 16.5¢ per Mcf with the buyer supplying all of the costs of compression. Thereafter, this new price is subject to escalation at a rate of 1¢ per Mcf per year each January 1st with the right of price redetermination every two years applicable to half of the gas.

Bow Valley's Whitefish Lake gas field in northeastern Alberta continued to operate satisfactorily during the 1973 fiscal year. Two additional wells were tied to the existing gathering system bringing daily average production up to 9.2 million cubic feet per day. Contract prices are currently being renegotiated.

In British Columbia, the Yoyo b-86-H, in which Bow Valley holds a 35 percent interest, was connected to an existing gathering system in February 1973. Although some difficulties were experienced during start-up, the well is now producing at a rate of 1.5 million cubic feet per day which may be increased to 3 million cubic feet per day later this year.



At May 31, 1973, net proven crude oil reserves in Canada after deducting all royalties, as determined by McDaniel Consultants (1965) Ltd., were 7,077,747 barrels representing a 19 percent decrease over the reserves of 8,755,824 barrels one year earlier. This decrease resulted mainly from a downward adjustment of Bow Valley's crude oil reserves in the Rodney and Gobles areas of Ontario and from normal production declines. Offsetting this decrease, net proven gas reserves in Canada of 179 billion cubic feet were 22 percent higher than reserves of 147 billion cubic feet last year and net proven reserves of natural gas liquids in Canada, amounting to 557,788 barrels, were 75 percent higher than reserves of 318,862 barrels one year earlier.

Excluding wells drilled by Panarctic Oils Ltd., Bow Valley participated in the drilling of 71 gross wells, or 25 net wells, during the 1973 fiscal year. Of this total, 43 gross wells, or 18 net wells, were completed as oil or gas wells, and the remainder were abandoned.

On May 31, 1973, Bow Valley's land portfolio included interests in approximately 42,000,000 gross acres, equivalent to 5,000,000 net acres, in Canada and nine foreign countries. Excluded from these figures are approximately 78,000,000 gross acres, equivalent to 46,000,000 net acres, of onshore and offshore properties in the Arctic Islands held by Panarctic Oils Ltd., in which Bow Valley has a 2.24 percent interest. On the same date, Bow Valley had applications pending for exploration and development rights in eight additional foreign countries.

During the 1973 fiscal year, Bow Valley spent, for its own account, \$5,700,056 on oil and gas exploration and development, compared to \$4,480,918 expended during the previous year.

Oil and Gas Industry Service Activities

Oil and Gas Contract Drilling

Bow Valley's oil and gas contract drilling operations are conducted through two divisions of the company and three joint ventures. The divisions are Hi-Tower Drilling and Sedco Drilling while the joint ventures are the Commonwealth Hi-Tower Arctic Joint Venture, in which Bow Valley has a 50% interest, operating four rigs in the Arctic Islands, the Drillarctic Joint Venture, in which Bow Valley has a 33 1/3% interest, operating one rig in the Arctic Islands, and Oslo Drilling A/S in which Bow Valley has a 20% interest, with a semisubmersible drilling rig under construction in Norway for use in the North Sea.

Preparing to run casing.



During the year, the Sedco Drilling Division acquired the assets and personnel of the Antelope Drilling Division which explains the absence of a report on Antelope's activities being included in this year's resume of activities.

Hi-Tower and Sedco drilled a total of 1,959,289 feet during the past year compared with 1,775,817 feet drilled by the two divisions and the Antelope Division in fiscal 1972. Profit margins improved by virtue of the higher volume of business, greater stability in prices, and operating efficiencies. Sedco and Hi-Tower operated a total of 30 drilling rigs, 10 vibrator units, and 3 helicopter seismic rigs. Subsequent to the year end, Sedco sold 8 vibrator units and is purchasing another shallow production rig.

Hi-Tower's new 20,000-foot Herculestransportable rig, Delta #1, constructed for activity in the Mackenzie Delta, is currently under a two-year contract with Imperial Oil and will drill a 15,000-foot test from the Immerk artificial island in the Beaufort Sea later in 1973.

The Commonwealth Hi-Tower Arctic Joint Venture drilled 79,462 feet in the latest year compared to 71,148 feet in the previous year. A fourth drilling rig was acquired in fiscal 1973 and was placed under contract with Imperial. The other three rigs continue to work for Panarctic. The Joint Venture's Rig #1 became the first rig in the Arctic Islands to have drilled over 100,000 feet of hole since being shipped to the Arctic. Rig #3 drilled two holes during the year, one of which was the deepest well yet drilled by the Joint Venture and reached a depth of over 13,000 feet. The rig has now moved to another location where a test, which is planned for 18,000 feet, will be the deepest well yet drilled in the Canadian Arctic. While gross revenues and operating income for the Joint Venture showed improvement in 1973 over the previous year's results, net income was down from a year ago due to higher depreciation charges attributable, in part, to the addition of the fourth rig.

Oilfield Equipment and Supply

Effective February 1, 1973, the name of Cardwell Supply Ltd., Bow Valley's oilfield equipment and supply subsidiary, was changed to Bow Valley Industry Supplies Ltd. and the Cardwell Supply name continued as a division of the subsidiary. The company experienced improved sales and earnings in fiscal 1973 as a consequence of the higher level of drilling activity in Canada which increased demand for oilfield equipment and supplies.

During fiscal 1973, Bow Valley had a 60% interest in the Bow Valley/Acres/Santa Fe-Pomeroy Joint Venture. Subsequent to the fiscal year end, the name of the operation was changed to Narwhal Arctic Services in which Bow Valley continues to hold a 60% interest with Santa Fe-Pomeroy Inc. holding 40%.

The Venture is concerned with supply activities in the Arctic. Shipping formed a large part of the business during fiscal 1973. Total tonnage handled during the year exceeded 13,000 tons, up from 3,500 tons the previous year. The Venture acts as Arctic Shipping agents for J. Lauritzen and OY Finnlines Ltd. giving it access to more than forty ice-strengthened cargo ships. During the year, the Venture handled a drilling rig and camp for Drillarctic involving transportation from Houston, Texas, to Depot Fiord on Axel Heiberg Island. Marshalling of the various supplies and equipment took place at the loading ports of Houston, New Orleans, Montreal, and Aalborg, Denmark. A trans-shipment operation took place in Holsteinborg, Greenland, and three small coasting vessels were used in Europe during the marshalling operations. Five ice-strengthened ships handled the rig move as well as the Venture's depot resupply operation at Resolute Bay. Materials originated from seven different countries.





First vessel to arrive and discharge at the newly constructed pier at Resolute Bay, August 1972.

A Bow helicopter airlifting skiers in the Canadian Rockies.

The Venture was involved in several small construction contracts including fuel storage tanks, a hangar, and the "ANIK" Telesat communications control station at Resolute. Seven housing units for the Northwest Territories Government were also erected during the year at the Resolute village.

In fiscal 1974, Narwhal's activities will be expanded to include heavy construction and feasibility studies based on oil, gas, pipeline, and mining projects in the Arctic.

Pipeline Construction and Gas Plant Maintenance

Wonderly & Kershaw Petrochemical Services Ltd., Bow Valley's pipeline construction and gas plant maintenance subsidiary, experienced a disappointing year profit-wise, registering a small loss for the year, although sales were higher than in the preceding year. The decline in profit margins is due in part to increased operating costs attributable to an unusually wet summer and a shortage of experienced industry personnel required to accommodate the large increase in pipeline construction operations carried out during the summer and fall of 1972.

The announcement, on February 15, 1973, that the Canadian Government would, henceforth, have to approve additional oil

exports to the United States has introduced uncertainty as to the timing of new pipeline projects. This has adversely affected the outlook over the near term for pipeline construction. The company's prospects are largely dependent on the timing of new export permits for both oil and gas.

Helicopter Services

Bow Helicopters Ltd., a subsidiary operating 14 helicopters, principally for the natural resource industries in Canada, had a disappointing year in fiscal 1973. Sales were down and net income registered a sizeable loss versus a modest profit last year. At the moment, there is a surplus of medium-weight helicopters in western and northern Canada which has curtailed revenue flight hours. An unusually wet summer season reduced the incidence of forest fires in the latest fiscal year. Fire fighting operations, under more normal weather conditions, provide a major source of summer work for helicopters.

Helicopter skiing continues to grow in the Canadian Rockies and Bow Helicopters is benefitting from the development of this relatively new sport. Expansion programs are underway for helicopter skiing in the Cariboo Mountains which, coupled with the continued popularity of air-lift skiing in the Bugaboos, augers well for increased utilization of Bow Helicopters' equipment during the winter months.





Wonderly & Kershaw constructing a pipeline in Alberta.

In spite of present uncertainties, the longer range outlook for helicopter utilization in the Canadian North appears promising once a decision is made to construct pipelines in that area. In the meantime, the company is continuing its efforts to obtain overseas contracts for some of its equipment.

Pollution Control

While Western Research & Development Ltd. registered an increase in sales and operating income during fiscal 1973, net income was slightly lower than a year ago by virtue of higher expenses incurred in the development of the Continuous Stack Emission Monitoring (CSEM) system.

Process evaluation and performance testing of sulphur recovery plants experienced increased activity during the year. A new service in catalyst sampling and testing was offered to industry. The Analytical Flow Ratio-Recovery Efficiency Monitoring (AFR-REM) system, the first phase of a closed loop process control scheme for sulphur recovery plants, was mounted in a trailer and successfully used in the field to augment performance evaluation services. Automatic process control for the AFR-REM system is expected to be completed by the end of 1973 and interest in this development is encouraging.

Work continued under a National Research Council grant for the improvement of the fundamental Claus sulphur recovery process involving the investigation of factors which currently limit the attainment of high recovery efficiencies.

Consulting in the environmental control field was expanded to include environmental impact studies related to proposed and existing industrial activities. An increasing number of studies were undertaken in many fields of environmental control including air, water, noise, and soil pollution. The environmental consulting group has just concluded work on source emission studies for the Cities of Calgary and Edmonton and has completed an evaluation of the air pollution potential of multi-plant development of the Athabasca Tar Sands under a contract from the Alberta Department



Western Research and Development airborne pollution monitoring equipment.

of the Environment. The environmental consulting group also carried out studies on air pollutant plume dispersion at several large sulphur plants. These studies resulted in the development of a new approach to mathematical modelling of concentrations from point sources incorporating such features as unusual meteorological and topographical effects.

Work was also carried out at all the major thermo-electric utility plants in Alberta involving problems encountered in the application of electrostatic precipitators for fly ash removal from stations fired with low sulphur coal. During the year air quality monitoring services and source monitoring services were expanded.

Mining Contract Drilling

The mining contract drilling business of Bow Valley is conducted through a subsidiary, Connors Drilling Ltd. of Vancouver, British Columbia. Connors Drilling has a subsidiary, MacPherson Drilling Co., Inc. of Montrose, Colorado, which operates in the United States. The two companies own a total of 113 drills ranging in maximum depth capacities from 400 to 3,500 feet. Personnel and equipment of the former Bow Valley subsidiary, Griffith Bros. Drilling Limited based in Manitoba, were acquired by Connors Drilling during the year.

Connors Drilling underground mining operations at Merritt, British Columbia.



Connors Drilling registered a substantial improvement in gross revenues and income before taxes compared with results in the previous year. Net income was slightly lower as a consequence of higher provisions for income taxes, both current and deferred. MacPherson Drilling achieved a modest improvement in both sales and net income in fiscal 1973 over results last year.

While British Columbia remains the principal area of Connors Drilling Ltd.'s activity, the company was also involved, during the year, in projects for the coal industry in Alberta and conducted operations in the Arab Republic of Yemen and in Greenland.

Manufacturing

Mainland Foundry & Engineering Ltd. enjoyed another good year in sales and earnings in fiscal 1973. The company's order backlog was at a high level at the year end ensuring full capacity operation at least for the initial months of fiscal 1974.

Installation of a new electric furnace and related facilities, including building additions at the Richmond foundry, are nearing completion. The new facilities will permit Mainland to enter the ductile iron and cast steel field and will provide additional grey iron capacity.

Mainland plans to move its heavy fabricating division into newly-erected premises located

Machining in Mainland's Vancouver machine shop.

Cast ring weighing over 6,000 lbs. was cast in the Richmond foundry.



on the Richmond property. The move will contribute to operating efficiencies and at the same time provide increased production capacity. Plans are being drawn up for a similar move of the machine shop division in the near future.

The branch sales warehouse in Toronto, which has been in existence less than two years, is developing a growing business both with the sawmill industry in Eastern Canada and with other industrial users of Mainland's products. The future of the Toronto operation appears promising.

Flame-Master, Bow Valleys heating and cooling equipment manufacturing division, had another successful year registering record sales and earnings. An expansion program has been approved which will double plant size and permit the division to handle the larger volume of business which is anticipated. Flame-Master's Special Products Division which designs and manufactures rooftop heating and air conditioning units also experienced a year of good sales and earnings growth.

Elworthy & Company Ltd., a Bow Valley subsidiary in British Columbia, whose principal business is the manufacture of specialized control equipment for the sawmill industry, experienced growth in sales and operating income during fiscal 1973. Although, the year got off to a slow start, business improved markedly during the second half. Higher lumber prices and a shortage of logs have made the sawmill industry in North America even more aware of the importance of achieving a high recovery of lumber and a reduction in sawdust and other waste. Improved measuring methods, more accurate positioning, and computer analysis of cutting programs are among techniques now being employed by the larger mills in an effort to get more saleable lumber out of each log. Elworthy & Company should be in a good position to profit from this trend.

During the year, Elworthy participated in two Sawmill Exhibitions in the United States where the company is selling some of its new products such as lumber measuring devices and the Lasalign Projector, a laser device used in sawing operations developed for Elworthy by Dominion Instruments Ltd., another Bow Valley subsidiary.

Wesdrill Equipment Division

Wesdrill Equipment, a Bow Valley division in Richmond, British Columbia, manufactures diamond bits, rods, and casing for the mining industry. The business was acquired by Bow Valley during the first quarter of fiscal 1972, with 1973 being the first full year of operations. The division registered sales approaching \$1,500,000 in the year and attained a satisfactory profit.

Significant recent increases in metal prices combined with the high level of economic activity indicate that worldwide mineral exploration should experience an up-trend. Wesdrill is concentrating more effort on export markets, particularly in the United States, where the division has recently opened an office in Phoenix.

Wesdrill is involved in the design and development of a diamond drill which is scheduled to be introduced to the industry in January 1974.

Affiliated Companies

Bow Valley's ownership in affiliated companies consists of a 24.9% interest in CDP Computer Data Processors Ltd., a 10.6% interest in Western Rock Bit Company Limited, and a 2.24% interest in Panarctic Oils Ltd.

Subsequent to the year end, negotiations were commenced to amalgamate CDP Computer Data Processors Ltd. with Digitech Corp. Ltd. and Digital Technology (Calgary) Ltd. The resulting amalgamation, if approved, will reduce Bow Valley's interest in the combined company to 9.4%. The new company, to be called Digitech Ltd., will provide a fully-integrated exploration data processing service and will be the largest Canadian-owned company in this field. Western Rock Bit Company Limited manufactures a complete line of bits for oil, gas, and mining drilling. In addition, the company produces pressure vessels for a variety of liquified petroleum gas applications.

Panarctic Oils Ltd. is 55% owned by nineteen natural resource companies and 45% owned by the Canadian Government. Panarctic holds interests in 78,000,000 gross acres in the Arctic Islands on which five gas discoveries have been made to date.

Consolidated Balance Sheet

May 31, 1973 (Canadian dollars)

ASSETS

	1973	1972 (restated)
Cash, including deposit receipts (Note 7)	\$ 784,733	3,161,081
Accounts receivable — Trade	9,945,746 1,216,125	8,460,742 733,168
Inventories (Note 3)	7,420,971 746,846	6,102,929 576,926
	20,114,421	19,034,846
Capital assets, at cost (Notes 1 and 4)	64,462,394 23,867,386	55,587,369 20,788,969
	40,595,008	34,798,400
Goodwill (Note 1)	4,111,713	4,122,174
Other assets and deferred charges Interest in Panarctic Oils Ltd., at cost (Note 5) Interest in Kommandittselskapet Oslo Drilling	2,284,166	1,719,476
A/S & Co., at cost (Note 6)	1,162,298	607,925
Investments in and advances to other companies, at cost	429,361	429,094
Unamortized deferred charges (Note 1)	472,132 323,387	383,499 290,075
	4,671,344	3,430,069

Approved on behalf of the Board:

Director

\$69,492,486 \$61,385,489

LIABILITIES

	1973	1972 (restated)
Current liabilities		
Operating bank loans (1973 — 7.25%; 1972 — 6.5%), secured (Note 7)	\$ 3,786,390	\$ 3,864,332
secured (Note 7) Accounts payable and accrued Estimated income taxes payable	1,800,000 8,823,540 134,852	1,140,000 7,063,940 56,208
Long term debt due within one year	3,427,120	2,594,265
	17,971,902	14,718,745
Long term debt (Note 9) Deferred revenue Deferred income taxes (Note 8)	14,467,908 185,345 608,683	10,398,788 239,895 836,903
Shareholders' equity Share capital (Note 10) — 5½% Cumulative redeemable preferred shares series A of a par value of \$20 each — Authorized and issued — 100,000 shares Outstanding — 82,240 shares (1972 — 84,640)	1,644,800	1,692,800
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 — 7,000,000 shares Issued and outstanding — 4,766,396 shares (1972 — 4,753,064)	15,259,807	15,055,757
Capital redemption reserve fund, on redemption of preferred shares	355,200	307,200
Contributed surplus	91,580	65,484
Retained earnings (Notes 8 and 12)	8,907,261	8,069,917
《大学》,"我们是一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个		35,191,158
Contingent liabilities and commitments (Note 13)	\$69,492,486	\$61,385,489

Consolidated Statement of Income

For the year ended May 31, 1973 (Canadian dollars)

	1973	1972
Revenue		
Contract drilling — oil and gas Engineering, forest products equipment and foundry sales Pipeline construction and plant maintenance Sale of oilfield equipment and supplies Contract drilling — mining Heating equipment sales Oil and gas sales, less royalties Aviation services Pollution control equipment and services Investment Gain (loss) on trading of oil and gas properties	13,428,374 8,452,559 7,434,617 5,061,869 2,932,700 2,631,162 1,781,577 1,268,434 182,500 (63,818)	\$12,788,372 11,576,786 5,220,204 4,974,752 4,370,402 2,336,083 2,459,841 2,507,830 1,054,957 233,289 364,226
Other	506,766	306,235
	61,721,541	48,192,977
Costs and Expenses	20 104 507	16 222 205
Cost of sales	20,184,587 26,149,689	16,332,805 19,732,324
Operating costs	6,990,907	5,950,848
Depreciation (Note 1)	3,493,083	2,709,959
Depletion (Note 1)	1,184,854	1,047,001
Mining properties abandoned	74,823	9,080
Amortization of deferred charges (Note 1)	283,164	213,221
On long term debt	1,025,183	587,493
Other	455,772	404,770
	59,842,062	46,987,501
T (N (N	1,879,479	1,205,476
Taxes on Income (Note 8) Current	224,789	97,880
Deferred	(228,220)	93,638
	(3,431)	191,518
Income Before Extraordinary Items	1,882,910	1,013,958
Extraordinary Items		440 514
Gain on sale of land	66,100	449,514
Net Income	\$ 1,949,010	1,463,472
Earnings per Common Share (Note 1) Income before extraordinary items	\$.27 \$.09
· 通過的可能是更多的可能是不可能的。 · · · · · · · · · · · · · · · · · · ·	\$.28	
Net Income	\$.28	.19

See notes to financial statements.

Consolidated Statement of Changes in Financial Position For the year ended May 31, 1973 (Canadian dollars)

	1973	1972 (restated)
Source of Working Capital Operations — Income before extraordinary items Add — Non-cash charges including depreciation, depletion, mining properties abandoned, amortization of deferred	\$ 1,882,910	\$ 1,013,958
charges, gains or losses on disposals of capital assets and deferred income taxes	4,718,967	4,166,367
Working capital provided from operations before extraordinary items Working capital provided from extraordinary items	6,601,877 66,100	5,180,325 965,309
Total working capital provided from operations Share capital issued for cash Issue of long term debt Other	6,667,977 204,050 7,912,806 25,816 14,810,649	6,145,634 501,106 6,299,001 95,550 13,041,291
Application of Working Capital	14,616,616	10.0 11,20
Additions to capital assets Land, buildings, drilling and other equipment Oil and gas properties and equipment and mining properties (exclusive of oil and	7,096,187	5,700,543
gas properties held for resale)	5,500,712	4,313,260
Less — Proceeds of disposals	2,242,768	912,029
Repayment of long term debt and change in current portion Acquisition of net assets of Wesdrill Equipment Ltd.,	3,790,198	2,346,412
less working capital thereof	564,690	367,779
Oslo Drilling A/S & Co	554,373 40,061	607,925 44,470
Dividends paid	1,063,666 56,499	1,060,011 120,606
Other	560,613 16,984,231	320,431 13,969,408
Decrease in Working Capital	2,173,582	928,117
Working Capital at Beginning of Year	4,316,101	5,244,218
Working Capital at End of Year	\$ 2,142,519	\$ 4,316,101

Changes in Components of Working Capital For the year ended May 31, 1973 (Canadian dollars)

	1973	1972 (restated)
Increase (Decrease) in Current Assets		
Cash, including deposit receipts	\$(2,376,348)	\$(2,393,991)
Accounts receivable —		
Trade	1,485,004	1,449,063
Other	482,957	(661,625)
Inventories	1,318,042	1,145,465
Prepaid expenses	169,920	240,943
Net increase (decrease) in current assets	1,079,575	(220,145)
Increase (Decrease) in Current Liabilities		
Operating bank loans	(77,942)	(60,521)
Bankers' acceptances	660,000	(1,060,000)
Accounts payable and accrued	1,759,600	1,472,799
Dividends payable		(231,539)
Estimated income taxes payable	78,644	56,208
Long term debt due within one year	832,855	531,025
Long term debt add within one year		- 001,020
Net increase in current liabilities	3,253,157	707,972
Decrease in Working Capital	\$ 2,173,582	\$ 928,117

Consolidated Statement of Retained Earnings

For the year ended May 31, 1973 (Canadian dollars)

	1973	1972
Balance at beginning of year	\$ 8,069,917	\$ 7,724,456
Net income for the year	1,949,010	1,463,472
	10,018,927	9,187,928
Deduct Dividends paid — 5½% Preferred shares series A	91,784 500,000	94,699 499,658
5% Second preference shares	471,882	465,654
Amount transferred to capital redemption reserve fund*	48,000	58,000
	1,111,666	1,118,011
Balance at end of year	\$ 8,907,261	\$ 8,069,917

^{*} Pursuant to The Companies Act of Alberta.

See notes to financial statements.

Notes to Consolidated Financial Statements

May 31, 1973

1. Summary of Significant Accounting Policies

The following accounting principles and practices of Bow Valley Industries Ltd. and subsidiary companies are set forth to facilitate the understanding of data presented in the financial statements.

Principles of consolidation:

The consolidated financial statements include the accounts of Bow Valley Industries Ltd. and its subsidiaries (herein collectively called "Bow Valley"), all of which are wholly-owned, as well as Bow Valley's share of assets and liabilities, revenues and expenses of three joint ventures.

Capital assets (excluding oil and gas properties), and depreciation:

Additions, improvements and repairs and maintenance that significantly add to productive capacity or extend the life of an asset are capitalized. Other expenditures for repairs and maintenance are charged to income as incurred.

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 mainly at the rate of 10%; manufacturing, sales and service equipment by the diminishing balance method, mainly at the rate of 20%; helicopters and related equipment by the straight-line method mainly at the rate of 10% of cost less an estimated residual value equal to 40% of cost; buildings by the diminishing balance method at rates from 2½% to 7½%.

Oil and gas properties and depletion:

Since June 1, 1968 Bow Valley 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. No gains or losses are ordinarily recognized upon the sale or disposition of oil or gas properties held for development purposes except under circumstances which result in major disposals of reserves. Gains or losses from the sale or disposition of oil and gas properties and rights held for resale are included in the consolidated statement of income.

Unamortized deferred charges:

Deferred charges of \$117,455 (1972 — \$153,456) relating to series A preferred share issue expense and long term debt issue expenses, are being amortized over a period of ten years and over the terms of the issues respectively. The balance of deferred charges amounting to \$354,677 (1972 — \$230,043) is being amortized over periods of three to five years.

Income taxes:

Certain charges to income in the financial statements differ in amounts from those deducted for tax purposes. In common with many other companies in the Canadian oil and gas industry, Bow Valley does not follow the tax allocation basis of accounting for the timing differences that relate to oil and gas lease acquisition, exploration and drilling costs. However, Bow Valley does provide for the tax effects of timing differences relating to depreciation claimed for tax purposes in excess of book depreciation.

Goodwill:

Goodwill acquired prior to fiscal 1972 in the amount of \$3,920,752 is shown in the consolidated financial statements at cost. Goodwill acquired in fiscal 1972 is being amortized over twenty years using the straight-line method and is shown at unamortized cost.

Earnings per common share:

Earnings per common share are calculated in accordance with Canadian practice on the basis of the weighted average number of common shares of Bow Valley outstanding during the year. No material change would result assuming full dilution.

Primary earnings per common share, calculated in accordance with United States practice, would not be materially different.

Acquisition of Christopher Explorations Ltd.

During fiscal 1973, Bow Valley acquired all of the issued and outstanding shares of Christopher Explorations Ltd. in exchange for 86,125 previously unissued common shares of Bow Valley. Christopher Explorations Ltd. is an asset holding company with its sole asset being undivided working interests in certain exploratory oil and gas permits located in the Mackenzie Delta and Beaufort Sea areas of the Canadian Arctic. This acquisition has been accounted for as a pooling of interests and for comparative purposes Bow Valley's fiscal 1972 accounts have been restated, with no effect on income.

3. Inventories

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

	1973	1972
Finished goods	\$2,077,438	\$1,754,332
Work in progress	649,316	453,930
Raw materials	667,865	497,092
Materials and supplies	3,322,446	2,633,976
Oil and gas properties and rights held for resale	703,906	763,599
	\$7,420,971	\$6,102,929

4. Capital Assets

	1973			1972	
	Cost	Accumulated depreciation and depletion	Net book value	Net book value (restated)	
Land	\$ 569,506	\$ -	\$ 569,506	\$ 615,519	
Buildings	1,921,336	612,483	1,308,853	1,087,967	
Leasehold improvements	241,088	137,551	103,537	87,729	
Office equipment	494,743	303,310	191,433	184,661	
Automotive equipment	2,217,732	1,182,291	1,035,441	780,057	
Drilling and related equipment	18,523,690	9,588,508	8,935,182	6,481,528	
Manufacturing plant and equipment	2,204,816	1,133,090	1,071,726	697,684	
Helicopters and related equipment	2,973,471	489,542	2,483,929	2,918,500	
Sales and service equipment —					
Construction	1,941,523	973,831	967,692	907,637	
Pollution control	586,175	228,441	357,734	372,667	
Other	231,403	146,488	84,915	54,405	
Oil and gas properties and equipment .	32,556,911	9,071,851	23,485,060	20,610,046	
	\$64,462,394	\$23,867,386	\$40,595,008	\$34,798,400	

5. Interest in Panarctic Oils Ltd.

Bow Valley has a 2.24% interest in Panarctic Oils Ltd. (a venture organized by private industry and the Government of Canada to explore for oil and gas in the Arctic Islands of Canada) the cost of which amounted to \$2,284,166 (1972 — \$1,719,476). Further contributions may be required in the future if the above percentage interest is to be maintained. Panarctic Oils Ltd. is, at present, in the exploratory stage of operations. The most recent published financial statements indicate that all costs and expenses have been capitalized and that Panarctic Oils Ltd. is deemed to have realized no profit and sustained no loss to December 31, 1972.

Panarctic Oils Ltd. shares are closely held, are not generally traded and no quoted market value exists. In the opinion of management the fair value of Bow Valley's interest exceeds cost.

6. Interest in Kommandittselskapet Oslo Drilling A/S & Co.

Bow Valley has a 20% interest in Kommandittselskapet Oslo Drilling A/S & Co., a Norwegian limited partnership, which was formed to construct and operate an offshore drilling rig. At May 31, 1973, the drilling vessel was under construction and it is expected that it will be commissioned in the spring of 1974. For comparative purposes Bow Valley's 1972 interest in the partnership has been restated as a separate item.

7. Bank Loans and Bankers' Acceptances

Operating bank loans and bankers' acceptances are secured as follows:

- \$2,000,000 floating charge demand debenture on the current assets of a subsidiary and various chattel mortgages given by Bow Valley and certain joint ventures in the amount of \$4,188,000 and guarantees of Bow Valley.
- Bow Valley has given general assignments of receivables, an assignment of the proceeds from a drilling program on Axel Heiberg Island and an assignment of bank deposit receipts of \$1,000,000 at May 31, 1973.

8. Income Taxes

As indicated in note 1, Bow Valley does not follow the tax allocation basis of accounting. Had such basis of accounting been followed for the two years ended May 31, 1973, the provisions and net income would have been as follows:

	Provi	Resulting		
	Current	Deferred	Total	net income
1972	\$ 97,880	\$827,038	\$924,918	\$730,072
1973	\$224,789	\$740,780	\$965,569	\$980,010

The approximate accumulated income tax reductions relating to all timing differences were as follows:

	1973	1972
Deferred taxes under the tax allocation basis	\$ 7,700,000	\$6,900,000
Deferred taxes which have been reflected in the accounts and which relate mainly to tax depreciation claimed in excess of		
book depreciation	\$ 608,683	\$ 836,903

9. Long Term Debt	1973	1972
Bow Valley Industries Ltd.: 7% Sinking Fund Debentures Series A, due March 1, 1986, redeemable with annual sinking fund instalments of \$158,000 in each of the years 1974 to 1985 inclusive (Authorized	1070	1072
— \$4,000,000)	\$ 2,873,500 423,005	\$ 3,040,000 352,585
Bank loans, at current interest rates — 7½% (1972 — 6½%), repayable at the rate of \$175,000 per month (1972 — \$105,375), secured mainly by oil and gas producing		
properties *	11,524,667	6,510,000
Note payable on equipment purchases with interest at 7% due in 1974, secured by retention of title	71.392	136,312
10.7% Mortgage payable in annual instalments of \$26,760	165,020	191,780
Other notes payable, 1974 to 1977	80,000	250,000
	15,137,584	10,480,677
Subsidiaries:		
Bank loans, at current interest rates — $8\frac{1}{2}\% - 9\frac{1}{2}\%$ (1972 — $6\frac{1}{2}\%$), repayable at the rate of \$51,661 per month (1972 — \$46,935), secured by parent company (Bow Valley Industries Ltd.) guarantee and by chattel mortgages on equipment *	2,420,621	2,028,926
Notes payable on equipment purchases with interest rates ranging from 10% to 15.5%, due 1973, secured by retention of title		12,845
4% Note payable in annual instalments of \$64,113 (1972 — \$65,395), secured by parent company (Bow Valley Industries Ltd.) guarantee	196,185	260,298
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	96,737	130,380
Other long term obligations, provisions and mortgages, payable 1974 to 1976, secured by those subsidiaries' lands and	43,901	70.027
buildings	2,757,444	<u>79,927</u> <u>2,512,376</u>
	17,895,028	12,993,053
Less: Amount due within one year	3,427,120	2,594,265
2000, 7 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	\$14,467,908	\$10,398,788

* The terms of the bank loans extend up to 1979, but the banks reserve the right to call the loans on demand.

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

The aggregate maturities of long term debt in each of the five years subsequent to May 31, 1973 are as follows: 1974 — \$3,427,120; 1975 — \$2,858,498; 1976 — \$2,823,715; 1977 — \$2,725,922; 1978 — \$2,020,423.

10. Share Capital, Share Purchase Warrants and Share Option

51/2% Cumulative redeemable preferred shares series A:

Bow Valley is required to expend \$40,000 per year (or such lesser amount as would increase the fund to \$80,000) on 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 cost of acquisition. The series A preferred shares are subject to redemption at any time at \$21 per share. On liquidation, dissolution or winding up they rank prior to the common and second preference shares and holders are entitled to receive \$21 per share plus accrued unpaid dividends.

5% Cumulative redeemable convertible second preference shares:

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 (3 1/3 common shares for one preference share). 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 deferral under certain conditions.

On or before March 31, in each year commencing with the year 1980, Bow Valley 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 puchasing the shares.

The following table sets out the changes in issued common share capital during the year ended May 31, 1973:

	Number of shares	Amount
Balance, May 31, 1972, as previously reported	4,666,939	\$15,055,727
Shares issued on acquisition of Christopher Explorations Ltd	86,125	30
Balance, May 31, 1972, as restated	4,753,064	15,055,757
Shares issued for cash upon exercise of:		
Options	12,420	202,340
Warrants	912	1,710
Balance, May 31, 1973	4,766,396	\$15,259,807

Of the authorized but unissued common shares, 576,514 were reserved at May 31, 1973, for the following:

- (a) Outstanding warrants which entitle the holders thereof to purchase an aggregate of 22,286 common shares at \$42.50 per share of which 19,339 expire on September 22, 1974, and 2,947 on February 16, 1975.
- (b) Options granted, or to be granted, up to an aggregate of 200,895 common shares of Bow Valley to officers and employees of Bow Valley under the terms of the Bow Valley Industries Ltd. Incentive Stock Option Plan.
- (c) 5% Cumulative redeemable convertible second preference shares convertible into, initially, 333,333 common shares of Bow Valley.

(d) Further consideration with respect to the acquisition of Western Research & Development Ltd. amounting to 20,000 common shares (Note 13).

As at May 31, 1973, the details of common shares under option are as follows:

	Number	Optio	Option price		Market value at date of grant	
Date granted	shares	Per share	Total	Per Share	Total	
May 5, 1969	18,350	\$25.89	\$ 475,082	\$27.25	\$ 500,038	
September 24, 1969	300	18.75	5,625	19.75	5,925	
November 13, 1969	400	17.50	7,000	16.75	6.700	
May 12, 1970	2,350	12.83	30,151	13.50	31,725	
February 23, 1971	7,200	16.03	115,416	16.875	121,500	
June 14, 1971	250	21.61	5,403	22.75	5,688	
September 29, 1971	500	25.89	12,945	27.25	13,625	
November 30, 1971	66,480	23.87	1,586,878	25.15	1,671,972	
May 18, 1972	6,325	28.74	181,780	30.25	191,331	
December 11, 1972	3,050	41.09	125,324	43.25	131,912	
March 15, 1973	1,500	33.61	50,415	35.375	53,062	
	106,705					

The following table sets out details regarding options exercised during the year ended May 31, 1973:

	Number of	Option price		Market value at date of exercise	
Date granted	shares	Per share	Total	Per share	Total
November 2, 1967	4,000	\$ 5.00	\$ 20,000	\$39.00	\$156,000
May 5, 1969	4,425	25.89	114,563	30.625 to 49.00	319,973
November 13, 1969	1,400	17.50	24,500	28.125 to 38.625	43,275
May 12, 1970	950	12.83	12,189	32.875 to 45.50	33,156
February 23, 1971	1,150	16.03	18,434	31.75 to 47.75	47,788
September 29, 1971	415	25.89	10.744	44.50	18,467
November 30, 1971	80	23.87	1,910	31.00	2,480
	12,420		\$202,340		\$621,139

Options are exercisable within a period of five years from the date of the grant. The value assigned to shares on the exercise of options is the option price multiplied by the number of shares issued. No charges are made against income.

11. Remuneration of Directors and Senior Officers

During fiscal 1973, there were eleven directors and eight officers of whom six were also directors. Directors' fees and officers' remuneration for the year amounted to \$7,603 and \$271,379, respectively, (1972 — \$8,395 and \$270,048). Officers who are also directors receive no remuneration in their capacity as directors.

12. Restrictions on Dividends

Under the terms of the Trust Deed for the 7% Sinking Fund Debentures Series A of Bow Valley Industries Ltd. and the terms of the series A preferred shares, dividends on common shares shall not be declared or paid:

- (a) If after giving effect to such declaration or payment, the aggregate of the consolidated retained earnings and capital surplus of Bow Valley 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 equally therewith then issued and outstanding.

At May 31, 1973, approximately \$6,400,000 (1972 — \$5,400,000) of the consolidated retained earnings, capital redemption reserve fund and contributed surplus were free of these restrictions.

13. Contingent Liabilities and Commitments

At May 31, 1973 Bow Valley and/or one or more of its subsidiaries were contingently liable as follows:

- (a) To the extent of approximately \$5,182,000 (1972 \$1,205,000) representing the liabilities of the co-owners in the joint ventures (Note 1), but against which Bow Valley would have a claim against the other co-owners and the interests of the co-owners in the joint venture assets.
- (b) As guarantor of discounted conditional sales contracts and other indebtedness of third parties in the amount of \$349,405 (1972 — \$333,013).

There are outstanding claims against a subsidiary (Bow Helicopters Ltd.) in the amount of approximately \$1,300,000 relating to an accident in July 1969. Counsel for the insurers have taken the position that these claims do not fall within the coverage afforded by the applicable liability policies, but this position has been disputed. Bow Valley's legal counsel is of the opinion that the subsidiary has a meritorious defense and should prevail at trial.

Pursuant to the agreement for the purchase of the outstanding shares of Western Research & Development Ltd. 5,500 common shares of Bow Valley are to be issued to the vendors in 1975 and 4,500 common shares 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 Bow Valley are to be issued to the vendors. Should such earnings of Western Research & Development Ltd. reach a certain level by 1975, the total 20,000 shares are to be issued in 1975.

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, 1973 and the consolidated statements of income, retained earnings and changes in financial position for the year then ended. Our examination included a general review of the accounting procedures and such tests of accounting records and other supporting evidence 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, 1973, and the results of their operations and the changes in their financial position for the year then ended, in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

CALGARY, Alberta July 6, 1973 PRICE WATERHOUSE & CO. Chartered Accountants

Five Year Financial Summary *

	<u>1973</u>	1972	1971	1970	1969
Gross income Depreciation and depletion Income before extraordinary items Extraordinary items income (expense)	\$61,721,541 4,677,937 1,882,910 66,100	\$48,192,977 3,756,960 1,013,958 449,514	\$40,204,002 3,482,156 622,491 (641,510)	\$44,738,773 2,795,663 2,010,144	\$34,797,030 2,049,640 1,364,451 251,119
NET INCOME (LOSS)	1,949,010	1,463,472	(19,019)	2.010,144	1,615,570
CASH FLOW (after preferred and preference dividends)	\$ 6,010,093	\$ 4,585,968	\$ 3,805,003	\$ 4,517,532	\$ 3,401,564
Shares outstanding at year-end					
Common	4,766,396 82,240 100,000	4,753,064 84,640 100,000	4,630,484 87,540 100,000	4,430,496 90,290 100,000	4,244,782 92,980 100,000
PER COMMON SHARE (1)					
Cash flow	\$ 1.26 .27 .01 .28	\$.98 .09 .10 .19	\$.84 .01 (.14) (.13)	\$ 1.04 .33 — .33	\$.82 .30 .06 .36
Dividends per share					
Common (pre-pooling)	\$.10 1.10 5.00	\$.10 1.10 5.00	\$.10 1.10 5.00	\$.10 1.10 5.00	\$.10 1.10 —

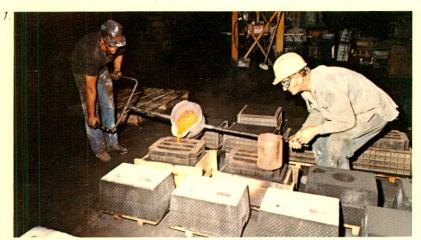
⁽¹⁾ Based on the average number of common shares outstanding during the respective years (1973 — 4,759,683; 1972 — 4,694,731; 1971 — 4,544,507; 1970 — 4,376,295; 1969 — 4,155,360) and after dividend requirements on series A preferred shares and second preference shares.

^{*} As restated for poolings of interests and prior period adjustments.



Wesdrill office and plant, Richmond, British Columbia.

- 1. Pouring small castings at Mainland's Richmond foundry.
- Putting finishing touches to a production run of sawmill edgers at Mainland's Richmond manufacturing plant.
- 3. Diamond setters setting core bits for mining exploration at Wesdrill's Richmond plant.



- 4. One of the many lathes in Mainland's machine shop.
- 5. A section of Wesdrill's diamond bit storage area.
- 6. Interior view of Elworthy electrical/electronic control equipment for sawmills.

