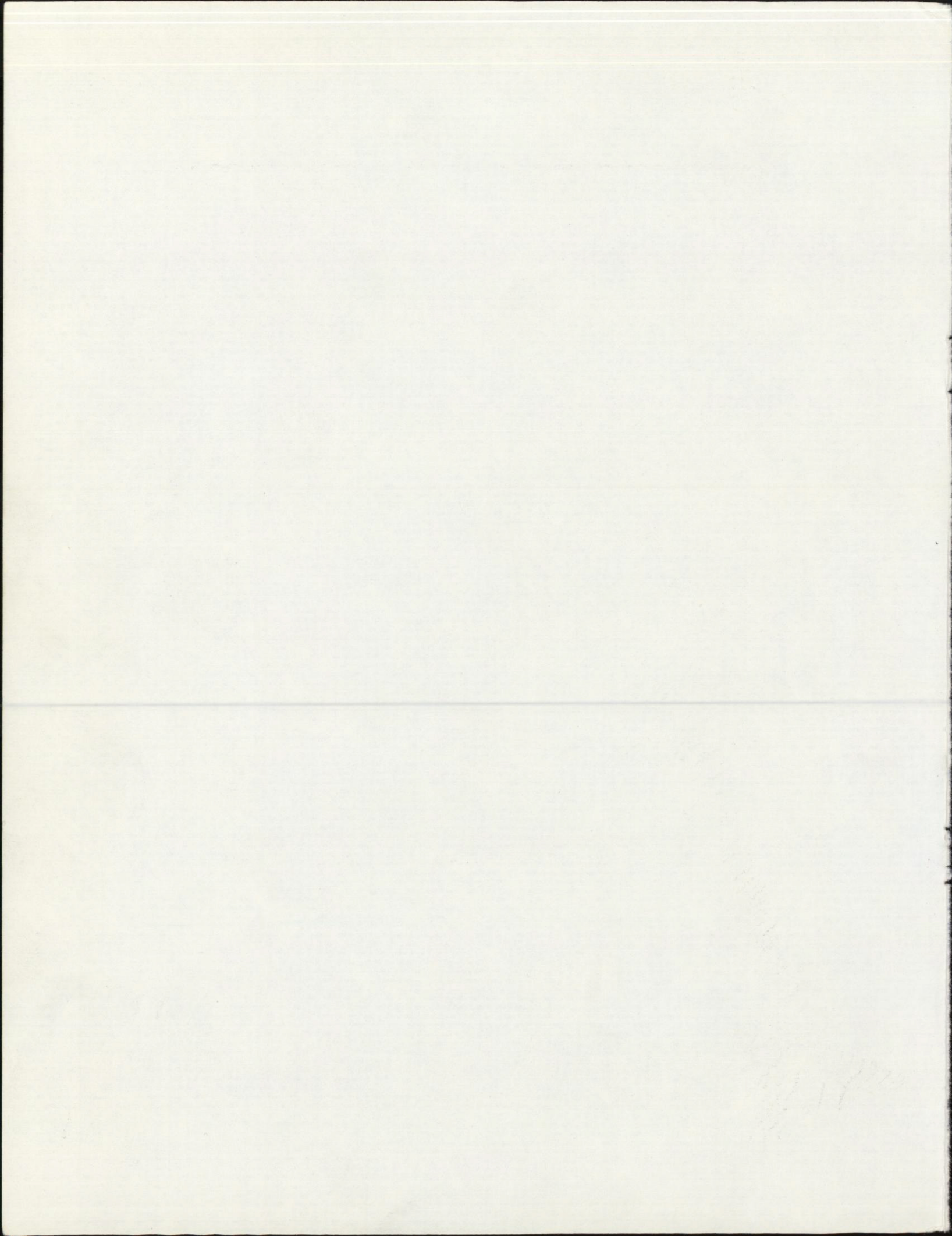


THE
LUBRIZOL
CORPORATION

ANNUAL
REPORT
1979

Lubrizol

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FINANCIAL HIGHLIGHTS

	1979	1978	% Increase
Total revenues	\$741,518,000	\$595,257,000	25
Net income	90,775,000	77,365,000	17
Net income per share	4.66	3.95	18
Dividends per share	1.60	1.40½	14
Capital expenditures	50,807,000	44,373,000	14
Depreciation	18,406,000	15,256,000	21
Research and development expenditures	22,649,000	20,572,000	10
Shareholders' equity	374,751,000	323,036,000	16

Common Share Price History

	1979		1978	
	High	Low	High	Low
1st quarter	49¾	41	38¾	33¾
2nd quarter	47¼	42½	43⅝	36⅞
3rd quarter	48⅝	44¼	48¼	37¾
4th quarter	59⅞	44	48	39¼

Dividends Paid per Common Share

	1979	1978
1st quarter	\$.40	\$.32½
2nd quarter40	.36
3rd quarter40	.36
4th quarter40	.36
Total	\$1.60	\$1.40½

THE LUBRIZOL CORPORATION

Lubrizol is a leading supplier to the petroleum industry of chemical additives to improve the performance of lubricants and fuels used in automobiles, trucks, off-highway equipment, marine engines and industrial applications. The company has 14 manufacturing plants and 40 sales and technical service offices throughout the world.

Contents

2	Message to Shareholders
10	Management's Discussion and Analysis
11	Consolidated Financial Statements
22	Ten Year Summary
24	Officers and Directors
25	Company Facilities

TO OUR SHAREHOLDERS

Principal Factors in 1979

The principal factors affecting Lubrizol's business in 1979 were stronger volume and higher prices. Revenues increased 25% and net income 17% over the prior year.

The increased prices resulted from the sharply higher prices of petroleum. Petrochemicals are the principal raw materials for additives. Moreover, substantial quantities of light, neutral oil are used as a processing medium and as a carrier. While the supply of these materials was generally good, their prices increased throughout the year.

Physical volume rose 10% in 1979. The gains in the U.S. market were ahead of those abroad. Accumulation of additive inventories did not appear to be an important factor. In a few cases delivery schedules were affected by plant and distribution capacities.

Capital expenditures were \$51 million in 1979. Construction delays slowed expansion. With larger units being installed to achieve economies of scale and the added effects of inflation, capital expenditures could reach the level of \$100 million in the current year. Again, construction time will be a determining factor.

Cash and short-term investments totaled \$27 million at year-end compared with \$58 million in 1978. Although the company had no debt outstanding at December 31, 1979, it may make arrangements to borrow in 1980 should circumstances warrant.

For the 15th consecutive year, a return on average shareholders' equity of 20% or more was achieved. The return in 1979

was 26%. Dividend payments totaled \$32 million. The amount paid per share has been increased for 17 consecutive years.

Approximately 34% of sales were for delivery to customers in the United States and 34% for Europe. Latin America accounted for 10%; Asia, 9% and other areas of the world, 13%.

Currency effects, principally due to devaluations in Brazil, reduced net income per share by 27 cents.

In May, the assets of The R. O. Hull & Company, Inc., a subsidiary engaged in the development and manufacture of metal finishing chemicals, were sold to a group of private investors headed by Hull's management. Hull's sales were approximately \$18 million in 1978.

In August, a new technical cooperation agreement was entered into with Lubrizol India Limited and, by mutual agreement, Lubrizol's interest was reduced to 40%, with the sale of a 9% interest to the Government of India. The agreement runs until 1987.

Concepts for Further Growth

The improvement in Lubrizol's business during the past several years suggests there is a growing awareness of the value of superior lubricants. The cost of repair or replacement of automotive and industrial equipment has risen with inflation. The cost of financing is high. In relation to these factors, the cost of superior lubricants is minor but the benefits are significant.

Chemical additives help provide the qualities needed for superior lubricants. The development of these chemicals has been Lub-

rizol's principal business for over 50 years, and primary emphasis on that field will continue. Capacity is being expanded; distribution strengthened and research staff is being increased. In other product areas, volume production of AMPST[™], a monomer used as a dye receptive agent for synthetic fibers and in water treatment applications, is scheduled to commence in 1980. A facility to produce a hot-melt, rust resistant coating for automotive frames and axles will commence operation in March 1980. The company, through its Polymer Chemicals and Diversified Products groups, will continue to strengthen its activities of this type.

The investment in new technologies is a relatively recent area for Lubrizol. The field has the potential for adding new dimensions to the company's business, but entails higher risk. In 1977, \$2.3 million was invested in Greenwich Oil Corporation, a firm which is engaged in oil recovery, primarily through thermal enhancement techniques. Subsequently, to gain further insights into new technologies, a total of \$1 million was committed to two venture capital funds. This led to several developments in 1979.

An investment of \$10 million was made in Genentech, Inc., a company which is engaged in the development of chemicals and chemical processes by means of genetic engineering. A total of approximately \$8.5 million was invested in Altus Corporation, a developer of high energy lithium batteries. An investment of \$1.5 million was made in Zikonix Corporation, a company which designs and makes digital computer-based process controllers.

In September 1979, Lubrizol Enterprises, Inc., a wholly-owned subsidiary, was formed as a holding company for Lubrizol's venture investments. The principal purpose of these investments is to permit Lubrizol to participate directly in the commercialization of new technologies with industrial applications.

In summary, during 1979 substantial progress was made, both in terms of current business and in developing and implementing plans for the future. This would not have been possible without the skill and dedication of our 3,900 employees. Their loyalty and the confidence shown by our shareholders are deeply appreciated.

* * *

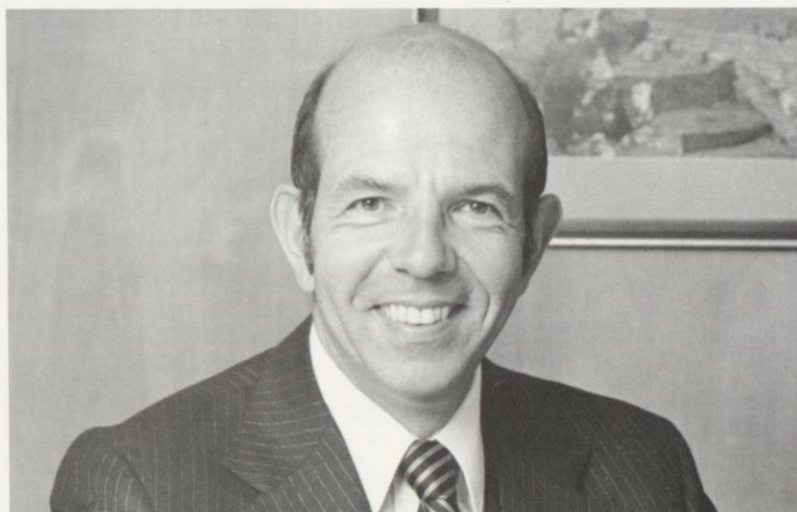
With deep regret, we note the death on March 9, 1980 of Vincent K. Smith, a founder of Lubrizol. Mr. Smith participated in the incorporation of the company in 1928 and was a member of its original Board of Directors, a capacity in which he served for 41 years until his retirement in 1969. His extensive talents contributed in many ways to the company's success and his warmth and congeniality will be remembered by his numerous friends in the Lubrizol organization throughout the world.

T. W. Mastin
Chairman of the Board

L. E. Coleman
President



T. W. Mastin



L. E. Coleman

March 20, 1980

RESEARCH AND MARKET DEVELOPMENT

Research expenditures were \$22.6 million in 1979 and the cumulative total of such expenditures for the past five years is \$96 million. A 4,200 square foot addition to the research laboratories in Wickliffe, Ohio is being completed and staff is being added to the Research and Development Division, which now consists of about 550 people. The principal focus of Lubrizol's research will continue to be that of additive development.

Expenditures for technical service activities, primarily for the evaluation of additive formulations in finished lubricants, were \$13.9 million in 1979, compared with \$11.7 million in 1978. The company presently has about 200 people engaged in these activities.

Lubrizol supplies a broad range of additives to a market that is diversified both from the product standpoint and geographically.

In 1979, some 800 different additives were supplied to petroleum industry customers in more than 100 countries. Business improved both in the United States and abroad, thus continuing a trend of the past several years.

The use of superior lubricants has been encouraged by automotive equipment manufacturers, both as a means of

achieving better performance and of avoiding costly repairs. This, in turn, has led to the development of quality standards. As pointed out in a recent public service announcement by a major car manufacturer, use of the wrong kind of oil or failure to change oil periodically can cause extensive damage.

Generally these quality standards originate in a request from a car manufacturer to improve certain properties of a lubricant. Changes in equipment design often necessitate the improvement. The request is presented to the Society of Automotive Engineers, and, if a new classification is warranted, the American Society for Testing and Materials is asked to develop test procedures to evaluate the lubricant for the desired properties. Chemical additives are used in the lubricant formulation to provide these properties. The combination of additives and the treating level depend to a large extent on the quality of the base oil.

Once satisfactory test procedures have been developed, language describing the new classification is prepared by the American Petroleum Institute and use of lubricants of the designated quality is recommended in car owners' manuals starting with the next model year. In preparation for this,

programs to qualify particular customers' lubricants under the new standard begin a number of months in advance. Retail outlets are supplied well ahead of the new car introductions and usually the new standard moves rapidly overseas, where additional tests are run to meet local requirements.

Until recently, the highest standard for passenger car engine oils was "SE". The "SE" classification was adopted in 1972 and use of engine oil of that quality has been recommended in car owners' manuals since that time. As a result, most of the engine oil sold in the domestic market for passenger cars meets this standard.

In December 1979, test procedures for a new classification designated "SF" were adopted by the American Society for Testing and Materials. Qualification work is now under way. "SF" engine oils will enter the market throughout 1980 and be specified for the 1981 model cars. One of the principal purposes of the new classification

Engine tests to evaluate additive performance are conducted at Lubrizol's mechanical testing facilities in the United States, England and Japan. In 1979, expenditures for technical service activities, primarily for mechanical testing, were \$13.9 million.



is to achieve greater protection against wear. Reduction of varnish-like deposits within the engine and less oil thickening are also achieved. Extension of oil change intervals, one of the original considerations, has been deferred to permit time for further development.

While the traditional role of high quality lubricants has been to improve performance and reduce maintenance, a new quality has been added in the recent past. Fuel economy engine oils entered the market several years ago and currently some 30 brands are being offered. Lubrizol is a principal supplier of additive systems for these lubricants. With the rising price of fuel, the benefit to the consumer will increase and, nationally, a substantial amount of gasoline will be saved. Results vary with the vehicle and operating conditions. In some of the company's test programs, improvements in fuel economy of from 1.3% to 3.8% have been demonstrated.

In the field of commercial transportation, fuel economy is being achieved through the use of fuel-efficient SAE 80W-140 gear oils for trucks.

Using these gear oils, fuel savings of from 1.2% to 3.6% have been demonstrated in test programs. Lubrizol introduced a new additive system of this type in 1977 and these gear oils are now being offered by a number of major oil companies.

With respect to heavy-duty engine oils for trucks and other equipment, the principal classification for diesels is currently "SE-CD". A number of developments are occurring in this field. One of these is that to achieve better fuel economy, the use of diesels is likely to increase, with more engines of that type being used in light and medium weight vehicles, as is the case in Europe. Another development concerns the increased use of viscosity improvers as SAE 15W-40 engine oils become more of a factor in the truck market.

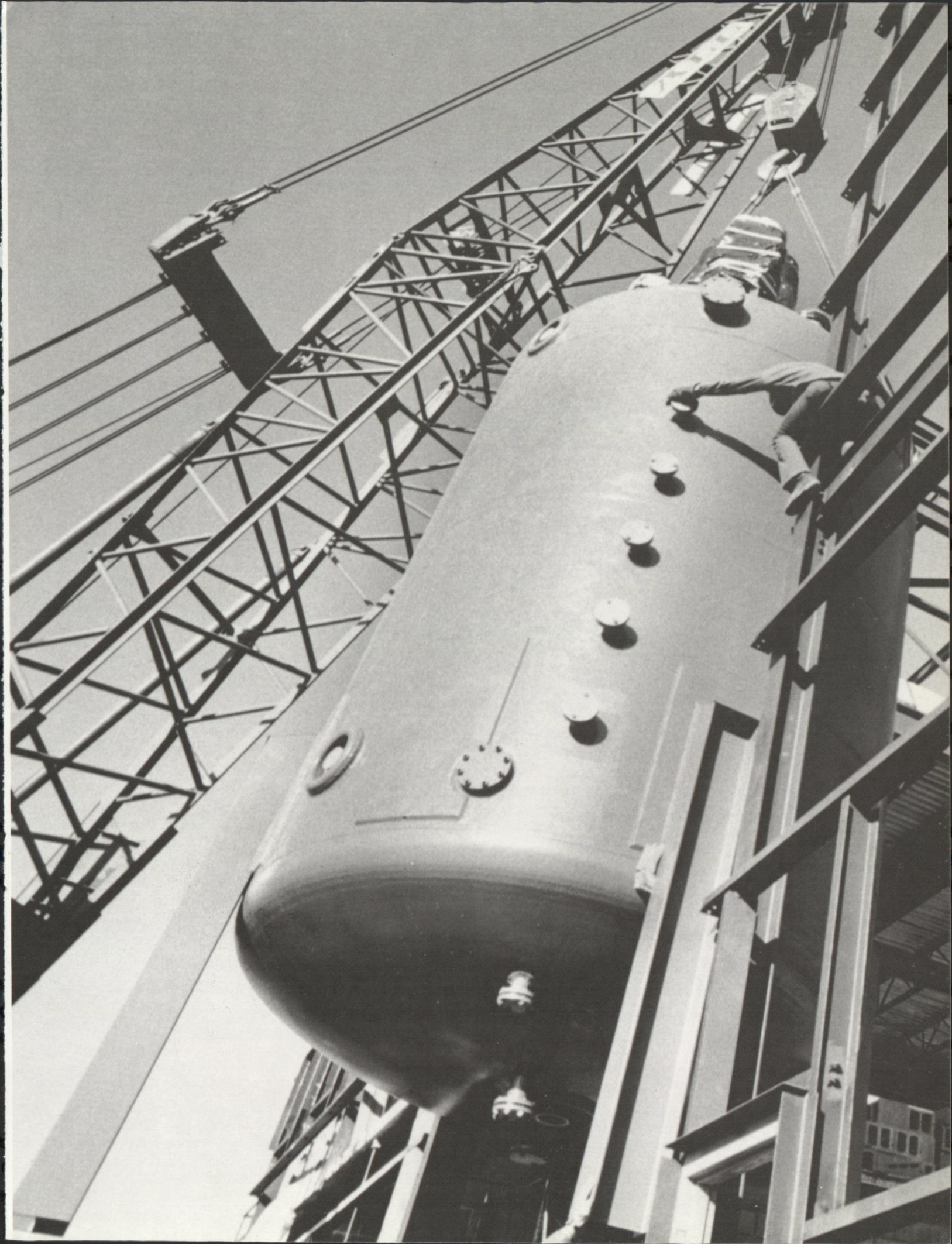
The oil consumption of heavy-duty diesel trucks is relatively high. A build-up of carbon in the piston ring area contributes to this problem. Higher emissions also result and regulations in this regard are becoming more severe. By keeping engines clean, additives help in eliminating these problems. Lubrizol has recently introduced in the U.S. market a high performance system of this type that has proven successful in Europe.

Concerning other product areas, a facility to produce up to 15

million pounds per year of AMPS™ monomer is scheduled for completion at the Bayport, Texas plant during 1980. AMPS has been well received, but with present capacity limited to one million pounds annually, the product has been on allocation. The AMPS monomer is currently being used as a dye receptive agent for synthetic fibers and in certain water treatment applications. It is useful in synthesizing ionic polymers and has a wide range of possible applications in the separation of solids from liquids, textile finishing, paper manufacture and the fields of plastics and coatings.

Manufacture of a thermoplastic material used to provide a rust resistant coating on various automotive parts such as frames and axles will commence in March 1980. A production unit is nearing completion at the Painesville, Ohio plant. The material, which is solvent-free, is applied in a dip coating tank at 225°-250°F. When it cools, it forms a tough, resistant coating. This product will be used by automotive companies on parts for some of the 1981 model cars.

A 15,000-gallon, glass-lined reactor is lowered into position at the dispersant facility which is under construction at the Painesville, Ohio plant. Dispersants, which Lubrizol developed, are used in engine oils to keep contaminants in suspension, thus preventing deposits on engine parts.



MANUFACTURING AND DISTRIBUTION

Capital expenditures in 1979 were \$51 million. Plant capacity is being expanded and distribution facilities improved. To achieve economies of scale, the production units are larger and in keeping with advances in the field, the equipment is more sophisticated. Inflation and regulatory requirements add to the cost.

At the Painesville, Ohio plant, a major facility to produce dispersants is scheduled for completion during the latter part of 1980. In addition, blending and warehousing facilities are being expanded. Dispersants are one of the principal additives used in engine oils. These chemicals, which Lubrizol developed, keep contaminants in suspension, thus preventing deposits on engine parts. There are a number of different types of dispersants and Lubrizol manufactures these additives at several locations.

Detergents have been one of the main chemicals used in lubricants for many years and Lubrizol also makes these additives at several of its plants. Detergents help maintain engine cleanliness and certain types have the added ability to neutralize acidic materials. They are particularly useful in heavy-duty engine oils where high temperature performance is needed. A major expansion of

detergent manufacturing at the Deer Park, Texas plant is scheduled for completion late in 1980.

The Deer Park plant is a major center for exports to Europe and the Far East. Product is moved via pipelines a distance of some four miles to a marine terminal on the Houston Ship Channel. The pipeline system is also used to receive certain raw materials. Plans call for doubling the capacity of the pipeline system and terminal facilities.

The polyisobutene plant at Port Arthur, Texas commenced operation in April 1979. Polyisobutene is a high volume starting material for a number of additives. It is a principal component of dispersants and is also used as a viscosity improver in the new fuel-efficient, gear oil formulations. The company's initial polyisobutene unit was constructed at the Deer Park plant in 1967 and in 1971 an additional unit was completed at the LeHavre plant of Lubrizol France. The material, which is a polymer with a number of uses, has been in short supply and during 1978 it was necessary to import it from Europe. The Port Arthur plant, constructed at a cost of \$26 million, adds new capacity of up to 65,000 tons annually.

With respect to activities abroad, production of both dispersants and detergents is being increased at the LeHavre plant of Lubrizol France. In Brazil,

construction with Shell Brasil, S.A. of the joint venture additive plant near Rio de Janeiro is progressing, with completion scheduled for the third quarter of 1980.

In Japan, the plant of Nippon Lubrizol Industries Corporation at Taketoyo will be moved to a new location at Kinuura. The Kinuura property, which is on the harbor a few miles away, was purchased for this purpose several years ago and initial installations have already been completed. The area around the present plant has become increasingly congested and there is no room for expansion.

During 1979, Lubrizol's two ships operated at virtually full capacity, transporting bulk shipments of additives and chemicals to and from Europe. The *Lucor Manor*, which went into service in the fall of 1978, made six round trips and the *Lucor Wickliffe*, which was placed into service in January 1979, made five.

To supplement production in Europe and provide additional service, a terminal site has been leased at the Port of Rotterdam for bulk storage, drumming and warehousing of additives. Operation of the terminal, which will include loading facilities for tank trucks, will commence in 1981.

The Lucor Wickliffe, at the marine terminal in Houston, takes on bulk shipments of additives for a voyage to Europe. The chemical tanker and its sister ship, the Lucor Manor, operated at virtually full capacity last year.



MANAGEMENT'S DISCUSSION AND ANALYSIS OF THE SUMMARY OF OPERATIONS (Page 22)

1979 vs 1978

Worldwide revenues amounted to \$741,518,000 in 1979, an increase of 25% over 1978. This increase was primarily due to improved selling prices and 10% more volume. Cost of sales increased 26% due to inflation and increased volume. Selling, administrative and research expenses were 10% higher than in 1978. The increase in these expenses was limited by the sale of the assets of The R. O. Hull & Company, Inc. during 1979. Other income (charges) were lower in 1979 due to exchange losses and a reduction of equity in earnings of non-consolidated companies. In 1978, other income included a \$6 million patent settlement.

Currency effects reduced net income \$5,318,000 in 1979. This compares with a gain of \$4,191,000 in 1978. The 1979 loss was primarily due to devaluations in Brazil, most of which were anticipated. In accordance

with the requirements of Statement No. 8 of the Financial Accounting Standards Board, inventories are charged to cost of sales at historical rates of exchange rather than at current rates. Currency effects consist of this difference plus exchange gains or losses. The after-tax loss on exchange was \$4,261,000 in 1979 and \$91,000 in 1978.

The effective income tax rate remained at 43%. The reduction in the U.S. statutory rate and higher investment tax credit were offset by non-deductible currency losses.

Net income increased 17% to \$90,775,000, primarily due to higher selling prices and volume. Adverse currency effects in 1979 and the patent settlement in 1978 limited the year-to-year increase in earnings.

1978 vs 1977

Revenues totaled \$595,257,000 in 1978, a gain of 16% over 1977. The primary reasons for the

higher revenues were improved prices and higher volume. Cost and expenses were up 15% due to inflation and increased volume. Income from operations amounted to \$124,205,000, a 20% improvement over 1977. In addition to improved prices and volume, currency effects contributed to the gain.

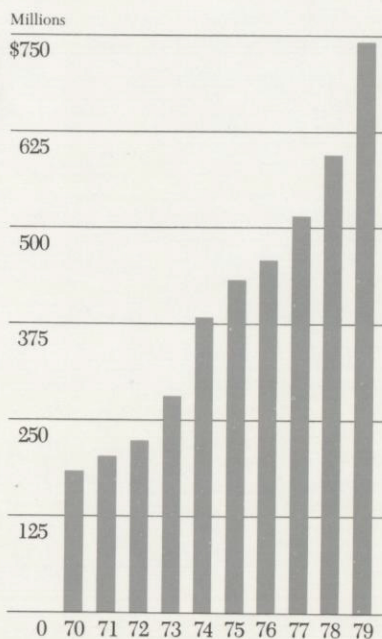
Currency effects added \$4,191,000 to net income in 1978 as compared with a \$2,064,000 loss in 1977. This added 21 cents to net income per share, compared with a loss of 11 cents per share in 1977. In accordance with the requirements of Statement No. 8 of the Financial Accounting Standards Board, inventories are charged to cost of sales at historical rates of exchange rather than at current rates. In addition, there was an after-tax exchange loss of \$91,000 in 1978 and \$41,000 in 1977.

With respect to other income (charges), a patent settlement added \$6,000,000 before tax. Interest income increased 44% to \$4,638,000 due to more short-term investments and higher interest rates. Equity in earnings of affiliated companies improved 48% primarily as a result of higher shipments. Other items—net, decreased principally due to lower financial costs for the Brazilian operations.

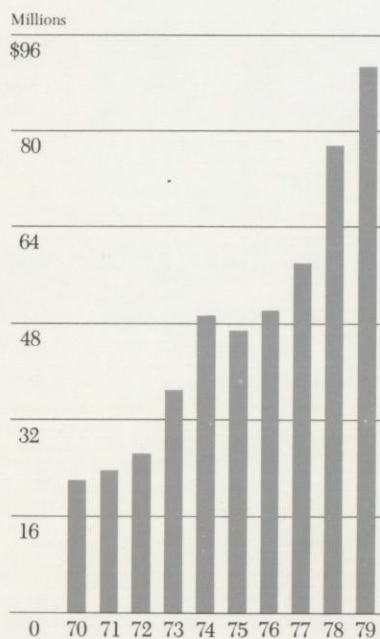
The effective income tax rate decreased from 44% to 43% because of non-taxable currency effects.

Net income increased 33% to \$77,365,000. The gain was primarily due to improved prices and higher volume, currency effects and the patent settlement.

Total Revenues



Net Income



**CONSOLIDATED
STATEMENTS
OF INCOME**

	Year Ended December 31 1979	Year Ended December 31 1978
Revenues:		
Net sales	\$724,734,066	\$586,476,957
Royalties and other revenues	16,784,085	8,780,233
Total	<u>741,518,151</u>	<u>595,257,190</u>
Cost and expenses:		
Cost of sales	511,038,306	404,473,279
Selling and administrative expenses	50,486,018	46,006,803
Research and development expenses	22,648,911	20,571,790
Total	<u>584,173,235</u>	<u>471,051,872</u>
Income from operations	157,344,916	124,205,318
Other income (charges):		
Interest income	5,233,442	4,637,799
Earnings of non-consolidated companies	1,533,048	2,265,744
Patent settlement		6,000,000
Other items — net	(4,277,530)	(660,623)
Income before taxes on income	<u>159,833,876</u>	<u>136,448,238</u>
Provision for taxes on income	69,059,000	59,083,000
Net income	<u>\$ 90,774,876</u>	<u>\$ 77,365,238</u>
Net income per share	<u>\$4.66</u>	<u>\$3.95</u>

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

**CONSOLIDATED
BALANCE
SHEETS**

Assets	December 31 1979	December 31 1978
Current assets:		
Cash	\$ 8,467,190	\$ 6,057,653
Short-term investments — at cost which approximates market	18,075,385	51,836,186
Receivables:		
Customers	116,126,323	97,295,344
Import deposits	5,095,714	8,570,056
Other	11,172,231	10,067,744
Inventories	137,399,041	98,908,822
Deferred income taxes	3,866,007	2,735,231
Prepaid expenses	2,806,027	2,754,898
Total current assets	<u>303,007,918</u>	<u>278,225,934</u>
Plant property — at cost:		
Land and improvements	30,510,258	25,793,558
Buildings and improvements	45,173,916	42,531,954
Machinery and equipment	202,682,856	167,355,612
Construction in progress	34,748,515	33,965,543
Total	<u>313,115,545</u>	<u>269,646,667</u>
Less accumulated depreciation	132,710,864	119,628,181
Plant property — net	<u>180,404,681</u>	<u>150,018,486</u>
Other assets:		
Investments in non-consolidated companies:		
At equity	23,411,986	10,426,328
At cost	10,700,000	500,000
Miscellaneous	2,417,617	2,564,083
Total other assets	<u>36,529,603</u>	<u>13,490,411</u>
TOTAL	<u>\$519,942,202</u>	<u>\$441,734,831</u>

Liabilities and Shareholders' Equity	December 31 1979	December 31 1978
Current liabilities:		
Accounts payable:		
Trade	\$ 55,632,124	\$ 43,764,935
Affiliated companies	6,866,966	5,628,898
Other	6,848,287	4,338,132
Accrued expenses:		
Income taxes	25,899,038	29,051,014
Other taxes	4,175,253	3,043,952
Employee compensation	11,683,520	7,068,767
Other	5,199,540	3,042,927
Total current liabilities	<u>116,304,728</u>	<u>95,938,625</u>
Other liabilities:		
Non-current liabilities	7,670,053	6,100,295
Deferred cash grants from a foreign government	2,370,699	2,246,234
Deferred income taxes	18,846,098	14,413,663
Total other liabilities	<u>28,886,850</u>	<u>22,760,192</u>
Shareholders' equity:		
Serial preferred stock without par value —		
Authorized and unissued — 2,000,000 shares		
Common Shares without par value:		
Authorized — 25,000,000 shares		
Outstanding — 19,874,985 shares in 1979 and 20,000,859 shares in 1978 (after deducting 592,174 treasury shares in 1979 and 466,300 treasury shares in 1978)		
	28,690,506	27,552,760
Retained earnings	346,060,118	295,483,254
Total shareholders' equity	<u>374,750,624</u>	<u>323,036,014</u>
TOTAL	<u>\$519,942,202</u>	<u>\$441,734,831</u>

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

**CONSOLIDATED
STATEMENTS OF
CHANGES IN
FINANCIAL
POSITION**

Source of Funds	Year Ended December 31 1979	Year Ended December 31 1978
Operations:		
Net income	\$ 90,774,876	\$ 77,365,238
Charges to operations not requiring funds:		
Depreciation	18,405,554	15,256,245
Deferred taxes	3,301,659	1,157,298
Other—net	234,689	350,633
Total	112,716,778	94,129,414
Increase in accounts payable	17,629,736	13,764,966
Increase in accrued expenses	5,089,994	11,577,024
Increase in non-current liabilities	1,569,758	2,714,409
Common Shares sold under Equity Purchase and Stock Option Plans	1,537,618	2,056,476
Net assets of subsidiaries sold	6,933,202	
Other	942,371	860,273
Decrease in cash and short-term investments	29,945,856	
TOTAL	<u>\$176,365,313</u>	<u>\$125,102,562</u>
Application of Funds		
Capital expenditures	\$ 50,806,780	\$ 44,373,358
Dividends on Common Shares	31,891,519	27,959,609
Purchase of Common Shares	8,706,365	208,917
Increase in receivables	19,689,577	21,083,858
Increase in inventories	41,334,673	8,061,722
Increase in investments in non-consolidated companies	23,803,620	3,237,312
Other	132,779	1,430,826
Increase in cash and short-term investments		18,746,960
TOTAL	<u>\$176,365,313</u>	<u>\$125,102,562</u>

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

CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

Year 1979	Number of Shares Outstanding	Common Stock	Retained Earnings
Balance, January 1	20,000,859	\$ 27,552,760	\$295,483,254
Net income			90,774,876
Cash dividends (\$1.60 per share)			(31,891,519)
Common Shares — Treasury:			
Shares purchased	(198,800)	(291,593)	(8,306,493)
Shares sold	89	5,279	
Shares issued upon exercise of stock options	5,962	220,712	
Equity Purchase Plan transactions:			
Shares issued	76,375	1,311,627	
Shares reacquired	(9,500)	(108,279)	
Balance, December 31	<u>19,874,985</u>	<u>\$ 28,690,506</u>	<u>\$346,060,118</u>
Year 1978			
Balance, January 1	19,886,209	\$ 25,525,631	\$246,257,195
Net income			77,365,238
Cash dividends (\$1.40½ per share)			(27,959,609)
Common Shares — Treasury:			
Shares purchased	(5,400)	(7,432)	(179,570)
Shares issued upon exercise of stock options	10,175	349,915	
Equity Purchase Plan transactions:			
Shares issued	111,875	1,706,561	
Shares reacquired	(2,000)	(21,915)	
Balance, December 31	<u>20,000,859</u>	<u>\$ 27,552,760</u>	<u>\$295,483,254</u>

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

NOTES TO FINANCIAL STATEMENTS

Note 1 — Accounting Policies

CONSOLIDATION — All subsidiaries are wholly-owned and consolidated. Non-consolidated companies consist of equity ownership in affiliated and other companies. The equity method of accounting is used when the company's ownership exceeds 20%. Other investments are carried at cost.

INVENTORIES — Inventories are stated at cost which is not in excess of market. For most inventories in the U.S., cost is determined using the last-in, first-out (LIFO) method. For other inventories, cost is determined using the first-in, first-out (FIFO) method.

DEPRECIATION — Depreciation of \$18,406,000 in 1979 and \$15,256,000 in 1978 was computed using the straight-line, sum-of-the-years-digits and declining-balance methods, at rates based on the useful lives of the assets. Different methods and rates are used for income tax purposes in certain instances. The deferred income taxes related to these differences have been provided.

Notes continued

RETIREMENT PLANS—The company and certain subsidiaries have retirement plans for employees. The practice is to fund accrued costs of the plans. Retirement plan costs charged to operations were \$8,708,000 in 1979 and \$7,907,000 in 1978. Pension fund assets exceeded the actuarially computed value of vested benefits.

Note 2 — Inventories

Inventories at December 31 consisted of the following:

	1979	1978
Finished products	\$ 41,263,816	\$ 31,907,582
Products in process	46,598,544	30,395,545
Raw materials and supplies	49,536,681	36,605,695
	<u>\$137,399,041</u>	<u>\$ 98,908,822</u>

Inventories on the LIFO method at December 31, 1979 and 1978 were about 37% and 34% respectively of consolidated inventories. The current replacement cost of these inventories exceeded the LIFO cost at December 31, 1979 and 1978 by approximately \$17,000,000 and \$4,800,000 respectively.

Note 3 — Income Taxes

The provision for taxes on income consists of the following:

	1979	1978
Current:		
United States	\$ 33,268,000	\$ 36,201,000
Foreign	32,489,000	21,725,000
Deferred:		
United States	1,680,000	947,000
Foreign	1,622,000	210,000
Total	<u>\$ 69,059,000</u>	<u>\$ 59,083,000</u>

Deferred income taxes are provided for differences in the time of recognition of revenues and expenses for tax and financial statement purposes. The tax effects of timing differences are as follows:

	1979	1978
Accelerated depreciation	\$ 1,784,000	\$ 1,390,000
Foreign inventory reserves	1,965,000	631,000
Intercompany profit in inventory	(1,758,000)	(268,000)
Other	1,311,000	(596,000)
	<u>\$ 3,302,000</u>	<u>\$ 1,157,000</u>

The differences between the provision for income taxes at the statutory rate and the tax shown in the consolidated statements of income are summarized as follows:

	1979	1978
Statutory tax at 46% (48% in 1978)	\$ 73,524,000	\$ 65,495,000
Different rates applicable to certain foreign income	886,000	(3,562,000)
Investment tax credit	(3,764,000)	(751,000)
DISC non-taxable earnings	(2,400,000)	(1,586,000)
Other	813,000	(513,000)
Total	<u>\$ 69,059,000</u>	<u>\$ 59,083,000</u>

Undistributed earnings of subsidiaries and affiliates of approximately \$150 million at December 31, 1979 and \$132 million at December 31, 1978 have been reinvested indefinitely in the operations of the subsidiaries and affiliates, principally for working capital, plant and equipment. No provision has been made for additional taxes which might result if at some future time such earnings were distributed to the company.

Note 4 — Employee Stock Options

The 1975 Employee Stock Option Plan provides that prior to January 1985, qualified and nonstatutory stock options may be granted to purchase up to 300,000 Common Shares. Options granted under this Plan are for a term of five years for qualified stock options and ten years for nonstatutory stock options. The option price is the fair market value of the Common Shares on the date of the grant. Option rights are exercisable in cumulative annual increments of 25 percent each commencing one year after date of grant.

Additional information as to these options is as follows:

	Number of Shares	
	1979	1978
Outstanding, January 1	189,350	206,450
Granted at \$45.50 per share	78,250	
Exercised at \$32.125 to \$41.00 per share	(5,962)	(10,175)
Expired at \$34.25 per share		(4,050)
Surrendered at \$32.125 to \$41.00 per share	(1,000)	(2,875)
Outstanding, December 31 — at \$32.125 to \$45.50 per share	260,638	189,350
Exercisable, December 31	146,663	105,787
Available for grant, December 31	33,025	110,275

On April 23, 1979, the shareholders approved an amendment to the 1975 Employee Stock Option Plan to permit the granting of stock appreciation rights in connection with nonstatutory stock options. These rights entitle the employee to receive the value of the stock appreciation in lieu of exercising the option. The appreciation can be paid in cash, Common Shares, or a combination of the two as determined by the company. As of December 31, 1979, no stock appreciation rights have been granted.

Note 5 — Equity Purchase Plan

The Equity Purchase Plan provides for the sale of Common Shares to eligible employees at a price equal to book value. Shares offered for sale under the Plan may be purchased for up to five years from the date of the offer. At the election of the employee or the company, shares issued under the Plan will be reacquired by the company at a price equal to the then book value. Shares offered for sale were 59,000 in 1979 and 93,500 in 1978. At December 31, 1979, there were 202,400 shares available for offer.

Additional information as to the shares is provided by the following table:

	Number of Shares	
	1979	1978
Outstanding, January 1	406,525	296,650
Sold to employees	76,375	111,875
Reacquired by the company	(9,500)	(2,000)
Outstanding, December 31	473,400	406,525
Offered for sale but not sold at December 31	28,700	47,975

The increase in book value of equity shares outstanding is charged to income from operations; accordingly, the average number of equity shares is not considered outstanding in computing net income per share.

Note 6 — Operations in Geographic Areas

The accompanying tables present information about the company's operations in different geographic areas:

	United States	Europe	Other	Eliminations	Consolidated Total
1979	<i>(In Thousands of Dollars)</i>				
Revenues	\$313,048	\$242,917	\$185,553		\$741,518
Intercompany transfers	126,359	4,962	2,831	\$134,152	
Total	<u>\$439,407</u>	<u>\$247,879</u>	<u>\$188,384</u>	<u>\$134,152</u>	<u>\$741,518</u>
Operating profit	<u>\$ 80,287</u>	<u>\$ 50,153</u>	<u>\$ 35,263</u>	<u>\$ 3,676</u>	<u>\$162,027</u>
General corporate expenses					4,682
Income from operations					<u>\$157,345</u>
Identifiable assets	<u>\$245,856</u>	<u>\$136,230</u>	<u>\$117,890</u>	<u>\$ 32,223</u>	<u>\$467,753</u>
Corporate assets					52,189
Total assets					<u>\$519,942</u>
1978					
Revenues	\$259,548	\$176,740	\$158,969		\$595,257
Intercompany transfers	100,597	4,347	1,052	\$105,996	
Total	<u>\$360,145</u>	<u>\$181,087</u>	<u>\$160,021</u>	<u>\$105,996</u>	<u>\$595,257</u>
Operating profit	<u>\$ 66,356</u>	<u>\$ 31,778</u>	<u>\$ 30,378</u>	<u>\$ 227</u>	<u>\$128,285</u>
General corporate expenses					4,080
Income from operations					<u>\$124,205</u>
Identifiable assets	<u>\$207,642</u>	<u>\$104,046</u>	<u>\$103,212</u>	<u>\$ 35,927</u>	<u>\$378,973</u>
Corporate assets					62,762
Total assets					<u>\$441,735</u>
1977					
Revenues	\$233,442	\$153,984	\$127,285		\$514,711
Intercompany transfers	82,326	1,069		\$ 83,395	
Total	<u>\$315,768</u>	<u>\$155,053</u>	<u>\$127,285</u>	<u>\$ 83,395</u>	<u>\$514,711</u>
Operating profit	<u>\$ 54,165</u>	<u>\$ 28,708</u>	<u>\$ 24,581</u>	<u>\$ 497</u>	<u>\$106,957</u>
General corporate expenses					3,600
Income from operations					<u>\$103,357</u>
Identifiable assets	<u>\$166,694</u>	<u>\$ 83,804</u>	<u>\$ 80,388</u>	<u>\$ 16,328</u>	<u>\$314,558</u>
Corporate assets					45,909
Total assets					<u>\$360,467</u>

NOTES:

- A. Intercompany transfers are made at prices comparable to normal unaffiliated customer sales for similar products.
- B. Affiliates carried on the equity basis are not allocated to geographic segments. Such affiliates are in the chemical additive business and operate in areas other than the U.S. and Europe.
- C. Identifiable assets are those assets of the company that are identified with the operations in each geographic area. Corporate assets consist of short-term investments and investments in affiliated and other companies.

Net assets of subsidiaries, excluding intercompany accounts, located outside the U.S. at December 31, 1979 and 1978 were \$178,820,000 and \$187,948,000. Net income of these subsidiaries after applicable income taxes was \$44,506,000 in 1979 and \$39,702,000 in 1978, and dividends received from the subsidiaries were \$55,598,000 and \$12,420,000 respectively. The after-tax exchange loss amounted to \$4,261,000 in 1979 and \$91,000 in 1978.

Note 7 — Quarterly Financial Data (Unaudited)

(In Thousands of Dollars Except per Share Data)

	1979			
	March 31	Three Months Ended		
		June 30	Sept. 30	Dec. 31
Revenues	\$160,999	\$189,327	\$192,077	\$199,115
Gross profit	48,192	58,223	62,373	61,692
Net income	17,568	22,740	26,483	23,984
Net income per share	\$.90	\$1.16	\$1.36	\$1.24

	1978			
	March 31	Three Months Ended		
		June 30	Sept. 30*	Dec. 31
Revenues	\$127,617	\$153,080	\$155,721	\$158,839
Gross profit	41,881	50,410	50,868	47,625
Net income	15,341	19,435	23,961	18,628
Net income per share	\$.78	\$1.00	\$1.22	\$.95

*Includes a patent settlement of \$6,000,000 which increased net income per share by 16 cents.

Note 8 — Business Segment Information

The company is a manufacturer of chemical additives for lubricants and fuels. Over 95% of the company's revenues, income, and assets are attributed to that business.

The company's ten largest customers, all major oil companies, accounted for approximately 48% of its sales in 1979. These customers, most of whom are international concerns serving world markets, require many different types of additives for their lubricant and fuel products.

A number of these customers are groups of affiliated companies, with the largest single group accounting for about 12% of sales in both 1979 and 1978. No other single group accounted for more than 10% of sales in either year.

OPINION OF INDEPENDENT AUDITORS

To the Shareholders and Board of Directors of The Lubrizol Corporation:

We have examined the consolidated balance sheets of The Lubrizol Corporation and its subsidiaries as of December 31, 1979 and 1978 and the related consolidated statements of income, shareholders' equity and changes in financial position for the years then ended. Our examinations were made in accordance with the 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, the accompanying consolidated financial statements present fairly the financial position of the companies at December 31, 1979 and 1978 and the results of their operations and the changes in their financial position for the years then ended in conformity with generally accepted accounting principles applied on a consistent basis.

Cleveland, Ohio
February 21, 1980

Deloitte Haskins & Sells

SUPPLEMENTAL FINANCIAL INFORMATION ON THE EFFECTS OF INFLATION

Continued high inflation has tended to distort income and capital measured by traditional accounting methods. The Financial Accounting Standards Board has issued Statement 33 requiring companies to show the effect of inflation on their operations using two different accounting methods.

The alternative methods are experimental and involve the use of assumptions and estimates. Accordingly, the results may be difficult to interpret; and although they may be used to indicate trends, they should not be viewed as a precise measurement of the effect of inflation.

Adjustment For General Inflation — Constant Dollars

The financial information on a constant dollar basis is expressed in the 1979 average-for-the-year dollars as measured by the Consumer Price Index for All Urban Consumers. The cost of inventories that are included in cost of sales and depreciation expense are the only items adjusted. In accordance with procedures in Statement 33, no further adjustments are to be made because other items of revenue and expense are assumed to have occurred proportionately with the Consumer Price Index over the course of the year.

Inflation also affects monetary assets which lose purchasing power when held during inflationary periods, since these assets will then purchase fewer goods or services. Conversely, holders of monetary liabilities will benefit during inflationary periods because less purchasing power will be needed to satisfy their liabilities. Inventories are non-monetary assets, although most other current assets and most liabilities are monetary. The effect (loss) of being in a net monetary asset position during the year is shown below net income in the statement.

Adjustments For Changes In Specific Prices — Current Costs

The financial information on the current cost basis has been adjusted to show depreciation expense based on the estimated current cost of property and equipment. These estimated costs were developed from indices published by private and governmental organizations. In addition, cost of sales was adjusted for the current cost of inventories at the time of sale. No other items of income or expense were adjusted.

Statement of Earnings For the Year Ended December 31, 1979

(In Thousands of Dollars Except Per Share Data)

	As Reported in the Primary Financial Statements	As Adjusted For	
		General Inflation (1979 Constant Dollars)	Changes in Specific Prices (Current Costs)
Revenues	\$741,518	\$741,518	\$741,518
Cost and expenses:			
Cost of sales*	494,814	503,561	510,080
Selling and administrative expenses*	49,419	49,419	49,419
Research and development expenses*	21,534	21,534	21,534
Depreciation	18,406	24,555	28,539
Other income (expense)	(2,489)	(2,489)	(2,489)
Total	581,684	596,580	607,083
Income before taxes on income	159,834	144,938	134,435
Provision for taxes on income	69,059	69,059	69,059
Net income	\$ 90,775	\$ 75,879	\$ 65,376
Loss from decline in purchasing power of net monetary assets		\$ 7,070	\$ 7,070
Increase in specific prices of inventory and property and equipment held during the year			\$ 59,297
Less effect of increase in general price level			48,845
Excess of increase in specific prices over increase in general price level			\$ 10,452
Net income per share	\$4.66	\$3.90	\$3.36
Net assets at year-end	\$374,750	\$420,210	\$467,943

*Exclusive of depreciation expense

NOTES:

- A. In accordance with the requirements of FASB 33, the income tax provision was not adjusted for the changes in income before tax. The result is to increase the effective tax rate from 43% reported in the primary financial column to 48% and 51%, respectively, in the adjusted columns.
- B. The same depreciation methods and rates were used in all depreciation calculations.
- C. At December 31, 1979, the current cost of inventory was \$158,203, and the current cost of property less accumulated depreciation was \$279,700.

Five Year Comparison

(In Thousands of Dollars Except Per Share Data)

	1979	1978	1977	1976	1975
Revenues:					
Historical	\$741,518	\$595,257	\$514,711	\$457,265	\$425,641
Average 1979 dollars	\$741,518	\$662,277	\$616,519	\$583,046	\$574,034
Dividends declared per share*	\$1.60	\$1.56	\$1.50	\$1.34	\$1.35
Market price per share at year-end*	\$52.13	\$49.02	\$41.18	\$44.90	\$51.47
Average consumer price index	217.4	195.4	181.5	170.5	161.2

*Stated in average 1979 dollars

TEN YEAR SUMMARY

(Dollar Amounts in Thousands Except per Share Data)

	1979	1978	1977
Summary of Operations			
Revenues	<u>\$741,518</u>	<u>\$595,257</u>	<u>\$514,711</u>
Cost and expenses:			
Cost of sales	511,038	404,473	354,609
Selling, administrative and research expenses . . .	73,135	66,579	56,745
Total	<u>584,173</u>	<u>471,052</u>	<u>411,354</u>
Income from operations	157,345	124,205	103,357
Other income (charges)	2,489	12,243	1,248
Income before taxes on income	159,834	136,448	104,605
Provision for taxes on income	69,059	59,083	46,536
Net income	<u>\$ 90,775</u>	<u>\$ 77,365</u>	<u>\$ 58,069</u>
Net income per share	\$4.66	\$3.95	\$2.96
Dividends declared per share	1.60	1.40½	1.25
Average shares outstanding, excluding Equity			
Purchase Plan shares (in thousands)	19,476	19,588	19,599
Consolidated Statement of Financial Position			
Current assets	\$303,008	\$278,226	\$229,668
Current liabilities	116,305	95,939	70,597
Working capital	186,703	182,287	159,071
Plant property — net	180,405	150,019	121,369
Other assets	36,530	13,490	9,430
Total	<u>403,638</u>	<u>345,796</u>	<u>289,870</u>
Less:			
Non-current liabilities	7,670	6,100	3,386
Deferred income and taxes	21,217	16,660	14,701
Net assets — Shareholders' equity	<u>\$374,751</u>	<u>\$323,036</u>	<u>\$271,783</u>
Other Data			
Capital expenditures	\$ 50,807	\$ 44,373	\$ 22,982
Depreciation	18,406	15,256	14,270
Number of employees at end of year	3,905	3,803	3,627
Number of shareholders at end of year	8,305	8,502	8,846
Common Shares outstanding (in thousands)	19,875	20,001	19,886
Shareholders' equity per share at end of year	\$18.86	\$16.15	\$13.67
Return on average shareholders' equity	26%	26%	22%

NOTES:

- A. The number of shares and per share amounts have been adjusted to give retroactive effect to the 2 for 1 stock split in 1971.
- B. In 1977 the LIFO method of valuing inventories was adopted for most United States inventories.

1976	1975	1974	1973	1972	1971	1970
\$457,265	\$425,641	\$382,951	\$279,111	\$221,450	\$200,873	\$186,842
311,211	300,385	252,895	181,302	146,086	132,031	121,089
50,233	47,117	41,842	36,673	31,550	29,535	26,053
361,444	347,502	294,737	217,975	177,636	161,566	147,142
95,821	78,139	88,214	61,136	43,814	39,307	39,700
(509)	4,608	5,203	5,081	2,437	2,414	1,323
95,312	82,747	93,417	66,217	46,251	41,721	41,023
44,355	35,855	42,959	29,479	20,008	18,321	19,173
\$ 50,957	\$ 46,892	\$ 50,458	\$ 36,738	\$ 26,243	\$ 23,400	\$ 21,850
\$2.52	\$2.31	\$2.49	\$1.81	\$1.30	\$1.16	\$1.09
1.05	1.00	.71½	.53½	.41½	.37½	.32½
20,245	20,302	20,289	20,315	20,168	20,154	20,108
\$224,992	\$192,931	\$190,734	\$138,401	\$ 97,353	\$ 77,885	\$ 72,046
65,913	63,873	79,943	48,897	31,779	27,647	28,483
159,079	129,058	110,791	89,504	65,574	50,238	43,563
113,455	107,072	89,997	77,769	74,793	73,041	66,681
5,558	5,379	11,178	8,378	6,493	5,423	4,709
278,092	241,509	211,966	175,651	146,860	128,702	114,953
2,201						3,000
14,258	10,698	8,522	5,808	4,711	3,674	2,989
\$261,633	\$230,811	\$203,444	\$169,843	\$142,149	\$125,028	\$108,964
\$ 19,420	\$ 22,214	\$ 22,640	\$ 12,744	\$ 11,255	\$ 14,517	\$ 14,007
13,800	11,599	10,172	9,622	8,935	8,100	7,317
3,557	3,588	3,479	3,286	3,037	3,037	2,906
8,760	8,440	8,027	7,944	7,972	7,815	6,995
20,467	20,363	20,294	20,314	20,158	20,161	20,147
\$12.78	\$11.33	\$10.03	\$8.36	\$7.05	\$6.20	\$5.41
21%	22%	27%	24%	20%	20%	22%

OFFICERS AND DIRECTORS

Directors

M. ROGER CLAPP

Former Chairman of the Board

L. E. COLEMAN

President and Chief Executive Officer

EDWARD L. HUTTON

President, Chief Executive Officer and a Director of Chemed Corporation, manufacturer of specialized industrial chemicals and health care products

W. M. LESUER

Vice President - Research and Development

T. W. MASTIN

Chairman of the Board

JAMES N. PURSE

Retired Vice Chairman of the Board and a Consultant of The Hanna Mining Company, a mining, processing and transportation company

DOUGLAS W. RICHARDSON

Vice Chairman of the Board

KARL H. RUDOLPH

Chairman of the Executive Committee of the Board of The Cleveland Electric Illuminating Company, an electric utility

H. JAMES SHEEDY

Partner in the law firm of Squire, Sanders & Dempsey

J. R. STITT

Vice President - Sales

RENOLD D. THOMPSON

Executive Vice President - Operations and Director of Oglebay Norton Company, a mining, vessel transportation and service company to the steel industry

Officers

T. W. MASTIN

Chairman of the Board

L. E. COLEMAN

President and Chief Executive Officer

DOUGLAS W. RICHARDSON

Vice Chairman of the Board

W. G. BARES

Vice President

W. T. BEARGIE

Vice President - Finance and Treasurer

GORDON B. CAMERON

Vice President - Personnel

PAUL L. CARLL

Vice President - Purchasing and Distribution

ROGER Y. K. HSU

Vice President and General Counsel

PHILIP L. KRUG

Vice President - Manufacturing

W. M. LESUER

Vice President - Research and Development

JOHN L. PALMER

Vice President - Corporate Technology

J. R. STITT

Vice President - Sales

ROBERT K. WILLIAMS

Vice President

EVELYN C. SLAUGHTER

Secretary

Honorary Directors

F. ALEX NASON

Founder of the Company

KELVIN SMITH

Honorary Chairman of the Board, Founder of the Company

KENT H. SMITH

Founder of the Company

Listing

Common Shares of The Lubrizol Corporation are listed on the New York Stock Exchange under the symbol LZ.

Transfer Agent, Registrar and Dividend Disbursing Agent

National City Bank
P.O. Box 5756
Cleveland, Ohio 44101

Annual Meeting

The Annual Meeting of Shareholders will be held at the offices of The Lubrizol Corporation, 29400 Lakeland Blvd., Wickliffe, Ohio, at 10:00 a.m. on Monday April 28, 1980.

Form 10-K

The Form 10-K Annual Report to the Securities and Exchange Commission will be available April 1. A copy may be obtained by shareholders upon written request to the Secretary of the Corporation.

THE LUBRIZOL CORPORATION

29400 Lakeland Boulevard,
Wickliffe, Ohio 44092,
(216) 943-4200

Manufacturing Plants

Painesville, Ohio
Bayport, Texas
Deer Park, Texas
Port Arthur, Texas

Apodaca, Mexico
Bombay, India
Bromborough, England
Durban, South Africa
Huelva, Spain
LeHavre, France
Niagara Falls, Canada
Rouen, France
Sydney, Australia
Taketooyo, Japan

Laboratories

Wickliffe, Ohio
Chemical Research
Polymer Research
Mechanical Testing
Hazelwood, England
Mechanical Testing
Atsugi, Japan
Mechanical Testing

Sales and Technical Service Offices

Detroit, Michigan
Houston, Texas
Montvale, New Jersey
Naperville, Illinois
Tulsa, Oklahoma
Whittier, California
Wickliffe, Ohio
Wilmington, Delaware

Athens, Greece
Bogota, Colombia
Bombay, India
Brussels, Belgium
Buenos Aires, Argentina
Caracas, Venezuela
Cham-Zug, Switzerland
Copenhagen, Denmark
Durban, South Africa
Freeport, The Bahamas
Guayaquil, Ecuador
Hamburg, West Germany
Helsinki, Finland
La Paz, Bolivia
Lima, Peru
London, England
Madrid, Spain
Manila, Philippines
Melbourne, Australia
Mexico City, Mexico
Milan, Italy
Oslo, Norway
Paris, France
Rio de Janeiro, Brazil
Santiago, Chile
Seoul, South Korea
Stockholm, Sweden
Sydney, Australia
Taipei, Taiwan
Tokyo, Japan
Toronto, Canada
Vienna, Austria

Subsidiaries

Lubrizol Enterprises, Inc.
Lubrizol Management, Inc.
Lubrizol Overseas Trading Corporation
LS & T, Inc. (Liberia)
Lubrizol A. G. — (Switzerland)
Lubrizol do Brasil, Limitada
Lubrizol of Canada, Ltd.
Lubrizol Española S.A.
Lubrizol Far East, Inc. —
(Philippines)
Lubrizol Singapore (branch)
Lubrizol France
Lubrizol Gesellschaft m.b.H.
(Austria)
Lubrizol G.m.b.H. — (West Germany)
Lubrizol Great Britain Limited
Lubrizol International S.A. —
(Bahamas)
Lubrizol Australia (branch)
Lubrizol Italiana S.p.A.
Lubrizol Japan, Ltd.
Lubrizol Limited — (England)
Lubrizol de Mexico, S. de R. L.
Lubrizol Scandinavia AB
Lubrizol Servicios Tecnicos,
S. de R. L. (Mexico)
Lubrizol South Africa (Pty.)
Limited
Nippon Lubrizol Industries
Corporation — (Japan)

Affiliates

Industria de
Aditivos do Brasil
Industrias Lubrizol, S.A. de
C.V. — (Mexico)
Lubrizol India Limited

