LUBRIZOL

1987
Annual
Report
THE
LUBRIZOL
CORPORATION

About
The Lubrizol Corporation

The Lubrizol Corporation is a specialty chemical company comprised of several business units that use chemical, mechanical and biological technologies to develop products for diverse markets. Some 4,800 men and women in plants, offices and laboratories around the world are engaged in:

Lubrizol's successful and growing additive business, serving worldwide markets in transportation and industry. Through Lubrizol Petroleum Chemicals Company, the company is a leading developer of specialty chemicals to improve motor oils, automatic transmission fluids, gear oils and other automotive, industrial and marine lubricants and gasoline and diesel fuels. In addition, the company makes specialty chemicals for industry.

Lubrizol's diversification program, dedicated to creating new specialty chemical businesses. Through investments, research and associations with other companies, Lubrizol Enterprises, Inc. is developing business opportunities based on new technologies. Agrigenetics Corporation is developing, producing and selling crop seeds and specialty vegetable oils for the agricultural, commercial and industrial markets.

Lubrizol, now in its 60th year, has a new logo. Its design, shown on the cover, features a red disk containing LZ, the company's longtime New York Stock Exchange symbol, followed by the company's name in a contemporary typeface.

Financial Highlights

(In Thousands of Dollars Except Per Share Data)	1987	1986	Increase
Revenues	$1,022,277	$985,182	4%
Net income	81,335	78,185	4
Net income per share	2.06	1.97	5
Dividends per share	1.22	1.17	4
Capital investments	55,804	52,155	7
Research and development expenses	61,538	51,223	20
Shareholders' equity	621,633	572,679	9
Total assets	939,378	877,907	7

Common Share Price History

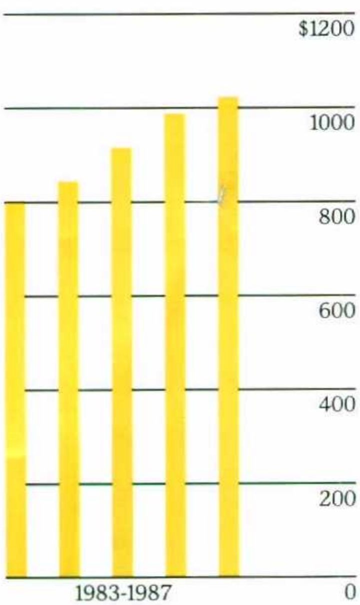
	1987		1986	
	High	Low	High	Low
1st quarter	$39\frac{3}{4}$	$32\frac{5}{8}$	$31\frac{3}{8}$	$25\frac{5}{8}$
2nd quarter	$41\frac{3}{4}$	$33\frac{3}{4}$	$35\frac{1}{8}$	$26\frac{5}{8}$
3rd quarter	$41\frac{3}{8}$	$35\frac{3}{4}$	$34\frac{3}{8}$	$25\frac{3}{4}$
4th quarter	$39\frac{1}{4}$	$25\frac{1}{4}$	$35\frac{1}{8}$	$28\frac{1}{4}$

Dividends per Common Share

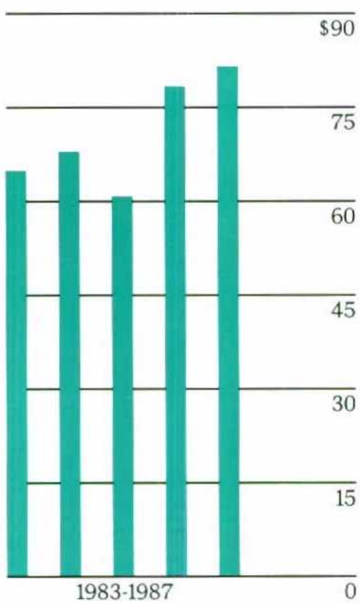
	1987	1986
1st quarter	$ .30	$ .29
2nd quarter	.30	.29
3rd quarter	.30	.29
4th quarter	.32*	.30*
Total	$1.22	$1.17

*Paid in January of the following year

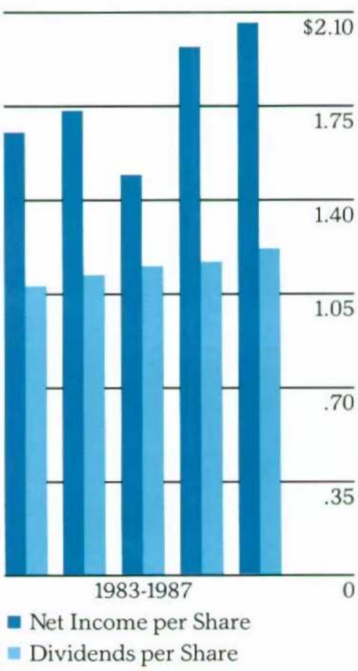
Revenues
(millions)



Net Income
(millions)



Net Income per Share/ Dividends per Share



To Our Shareholders

Consolidated revenues for 1987 increased 4% and exceeded the $1 billion mark for the first time. Consolidated net income increased 4%, and net income per share was $2.06. Additive shipments also rose 4%.

Consolidated net income included an after-tax gain on the sale of investments of $14 million, or 35 cents per share, and after-tax charges of $6.4 million, or 17 cents per share. The charges as well as the gain were in connection with our diversification program rather than our worldwide additive business.

We are pleased to report that consolidated revenues for 1987 were $1,022,277,000 and thus exceeded the $1 billion mark for the first time. Revenues exceeded $100 million in 1966 and passed the $500 million mark in 1977.

Consolidated net income for 1987 was $81,335,000, and net income per share was $2.06. This included an after-tax gain on the sale of investments of $14 million, or 35 cents per share, and after-tax charges of $6.4 million, or 17 cents per share. The gain was on the sale of shares of Genentech, Inc. At year-end, Lubrizol owned 6.5 million shares of that company. The charges were for a write-off of the intangible assets of a research program in advanced plant science and a write-down of vegetable oil inventory.

Dividends to shareholders for 1987 totaled $48.2 million. The quarterly dividend was increased from 30 cents to 32 cents per share in the fourth quarter. A total of 760,000 Lubrizol shares were repurchased during the year.

A shareholder rights plan, which included a dividend distribution of one purchase right for each common share, was adopted. The rights transfer only with the shares. The principal purpose of the plan is to prevent violation of the voting requirements, previously adopted by shareholders, concerning the acquisition of 20% or more of the shares outstanding, or a tender offer for like amount. Such circumstances could occur in a takeover attempt, in which case rights certificates would be issuable to shareholders.

In view of the attention being given to the U.S. balance of trade, a comment in that respect is merited. Lubrizol is a major exporter of additives to improve the performance of lubricants and fuels worldwide and also exports agricultural products. In addition, the company receives dividends, royalties and fees from abroad. The total contribution from these sources in 1987 was more than $300 million.

Capital expenditures for 1987 were $42 million, slightly above those of a year ago. They are expected to be about $50 million in 1988.

Cash and short-term investments totaled $92.7 million at the end of 1987 compared with $85.6 million a year ago. The company's financial position continues to be strong. Shareholders' equity at year-end was nine times debt.

Lubrizol's Principal Business

Additives have been Lubrizol's principal business for 60 years. These are specialty chemicals which are used to improve the performance of lubricants and fuels. Lubrizol pioneered development of these products and currently serves a worldwide market, with customers in over 100 countries.

The company has excellent people, technology and service, and these basic strengths have enabled it to maintain a leadership position in this market. To assure that this continues to be the case, Lubrizol Petroleum Chemicals Company was formed last spring. Lubrizol Petroleum Chemicals Company combines the sales, marketing, manufacturing and international activities relating to this field in a new business unit of the company. Its products include additives for motor oils, automatic transmission fluids, gear oils and other lubricants and, in its Business Development Division, fuel additives and industrial and diversified products.

Return on equity in the Transportation & Industry segment, which includes Lubrizol's worldwide additive business, was 23%. Return on equity for the company as a whole was 14%. Product shipments in the Transportation & Industry segment rose 4%.

The opportunities for further growth in this business are very good. A new standard for passenger car motor oils was issued in the first quarter of 1988, and improvements for other lubricants are being developed. We have a growing business in fuel additives. Good growth has been achieved in industrial and diversified products, and the formation of additional business units to focus on these and related markets is being studied. An acquisition or joint venture which would strengthen these activities may be one means of accomplishing this.

Lubrizol's Diversification Program

In addition to its successful and growing additive business, the company began a diversification program several years ago. The purpose of this program is to develop new specialty chemical businesses and thereby create value for shareholders.

Our activities relating to industrial and diversified products are part of this program. There are two other aspects of this program. One of these concerns the activities of Lubrizol Enterprises, Inc. The other concerns the activities of Agrigenetics Corporation.

Lubrizol Enterprises is responsible for developing business opportunities based on new technologies in the biological, chemical and material sciences. One of the first fields we identified as being of particular interest was biotechnology, and, in 1979, this led to an investment in Genentech, Inc. Subsequently, we invested in a number of other companies seeking to develop advanced technologies.

Viewed in terms of an investment portfolio, this program has been successful. The market value of marketable securities at the end of 1987 exceeded the cost by $260 million. Now that a core of these investments has been established, greater emphasis is being given to developing some of the present activities into business units of Lubrizol. While an exception will be made in the case of an unusual opportunity, new investments will receive a lower priority. In addition, some of the present investments which no longer fit into our program will be sold.

In addition to its investment activities, Lubrizol Enterprises, through contract research, joint ventures and acquisitions, is developing some attractive product opportunities for Lubrizol. The Agribusiness segment of Lubrizol was an outgrowth of this work. After gaining insight into the various aspects of biotechnology, we concluded that there were applications for that technology in agriculture. Directly, there was an opportunity to use biotechnology to develop superior crop seeds. Indirectly, there was an opportunity to develop unique oilseeds, specialty oils and their chemical derivatives.

In 1982, Lubrizol Enterprises helped establish and invested in Sungene Technologies Corporation, an advanced plant science company, and contracted with Sungene for research. We also acquired two seed companies and contracted for research from other organizations and institutions. In addition, a subsidiary to market specialty oils was established.

In 1985, Lubrizol acquired Agrigenetics Corporation, a plant science company with several seed divisions. Our seed and specialty oil subsidiaries were merged into it to form the present Agribusiness segment of Lubrizol. The research in advanced plant science has remained in the New Technologies segment along with other activities of that nature.

There were two developments regarding research in advanced plant science last year. One was that Lubrizol Enterprises and Sungene established Sunagra Research, a partnership, to engage in research of this type. The other was that the intangible assets of a separate program in advanced research were written off. Part of Agrigenetics' research was funded by a research partnership, and, in late 1985, we purchased the assets of that program. These assets were written off in the fourth quarter of last year. This resulted in a charge in the New Technologies segment of $7.2 million, which, after-tax, was 12 cents per share. Funding of this research will continue pending disposition of the assets.

There was also a charge in the Agribusiness segment of $3 million, which, after-tax, was 5 cents per share, for writing down vegetable oil inventory. The oil produced from the crop harvested in 1986 did not meet the desired standard for a high oleic, specialty oil. The oil produced from the crop harvested in 1987, which is now being sold, meets the standard, and we have further plans to develop the market for these oils.

L. E. Coleman

W. G. Bares

Corporate Officers

During 1987, W. G. Bares, President, was also elected Chief Operating Officer; William D. Manning, Senior Vice President, also became President of Lubrizol Petroleum Chemicals Company; George R. Hill, former Vice President—Research and Development, was elected Senior Vice President—Research and Development; and J. I. Rue was elected Secretary. In January 1988, J. R. Cooper was elected Controller—Financial Services.

L. E. Coleman

L. E. Coleman
Chairman of the Board

W. G. Bares

W. G. Bares
President

March 15, 1988

TRANSPORTATION & INDUSTRY

Lubrizol Petroleum Chemicals Company

1987 was a successful year for Lubrizol Petroleum Chemicals Company. Units shipped increased by 4% over the very strong performance of the previous year. Segment revenues increased 6%. Increased material costs and other expenses held segment income level with 1986, but price increases were instituted late in the year to offset these increased costs.

Financial Highlights

	In Thousands	
	1987	1986
Revenues	$939,766	$889,220
Research expenses	40,278	36,085
Operating income	139,533	139,632

To maintain its world leadership as a developer and supplier of specialty chemicals, Lubrizol is dedicated to a strong, ongoing, research program. In 1987, consolidated research expenses increased to over $61 million, or 6% of revenues. Of these expenses, $40 million, or approximately 65%, were for the development of products for Lubrizol Petroleum Chemicals Company. This was an increase of 12% over the previous year. Technical service costs, principally mechanical testing to qualify customers' lubricants for various standards, were an additional $31 million, an increase of 11%.

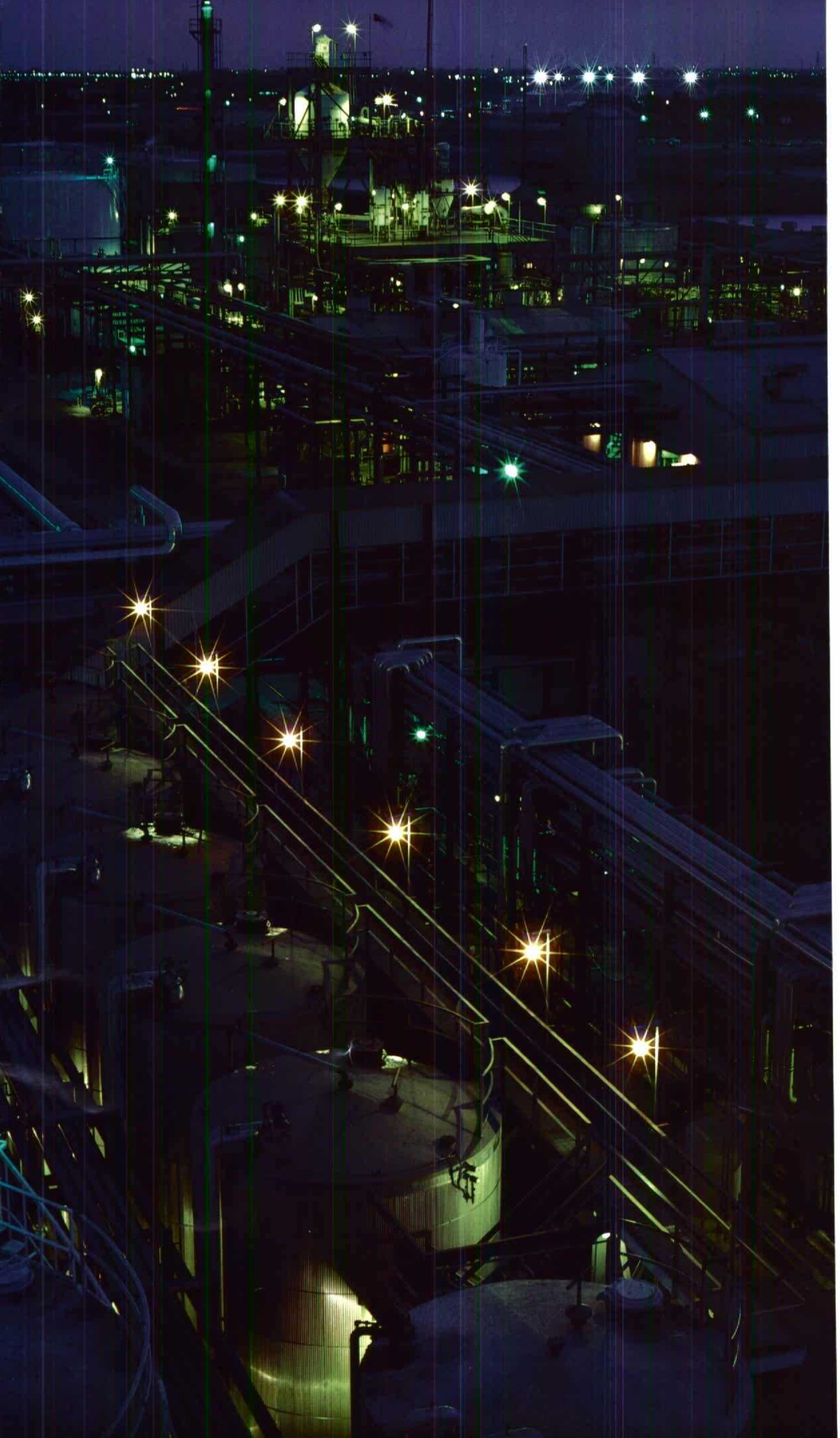
These increases were incurred primarily to develop and test products to meet new standards. This research investment in products for Category SG for passenger car motor oils, Category CE for heavy duty diesel, new automatic transmission fluids and other new products is essential prior to their introduction. Once introduced, standards such as these represent significant potential for increased revenues and earnings.

Lubrizol Petroleum Chemicals Company

In the nearly 60 years of Lubrizol's existence, the petroleum industry has been the primary focus of our business. As we broaden the base of our specialty chemicals business, we will continue to recognize the preeminence of this segment of our business.

Lubrizol Petroleum Chemicals Company was formed during 1987 to maintain a concentrated focus on this important marketplace. Its organization includes manufacturing, sales and marketing, product development and international operations. Its most important objective: serve our customers around the world with outstanding products and services. As this organization becomes more fully developed, products that do not relate to the petroleum industry will be transferred to other business segments.

Lubrizol Petroleum Chemicals Company markets additive systems to oil companies and lubri-



Lubrizol's Deer Park, Texas plant is the largest of 17 worldwide manufacturing facilities, producing a broad range of specialty chemicals for markets in transportation and industry.

Process control and statistical techniques help to assure the quality of Lubrizol products in the manufacturing process.

Advanced engine design technology and extended new car warranties are major factors influencing the introduction of API SG motor oils.

Formulations meeting the higher standards of API SG motor oils undergo rigorous testing to assess protection against oil thickening, engine deposits and valve train wear.

cant compounders in over 100 countries. Below is a geographic distribution of 1987 sales:

United States	31%
Europe	33%
Far East	14%
Latin America	9%
Other Areas	13%

Market changes and the resulting need for new products and product adjustments are prevalent in this area of our business. Demand for higher quality lubricants, containing higher additive content, rose in key transportation markets during 1987. In addition, we continued to establish a strong presence in other sectors of industry where we have been developing expertise for some time. The following is a review of important developments.

Passenger Car Motor Oil

The world market for passenger car motor oil continues to be the largest segment of the lubricant business. In 1987, the total population of autos climbed to 365 million, including the 35 million new cars and light trucks manufactured during the year. By 1990, global production capacity is expected to exceed 37 million new passenger vehicles per year.

This huge international fleet requires a variety of lubricants, but certainly crankcase oils represent the largest segment of demand. While worldwide volume is great, annual growth of lubricants is estimated to remain about 1% per year through 1992. Among the reasons for this slow growth is the increasing number of cars whose manufacturers recommended longer drain intervals. In addition, many new vehicles are equipped with smaller four- or six-cylinder engines, which require less oil per change. They also have small internal tolerances, which means they burn and leak less oil during operation.

Counter trends are developing, however, including the growing number of quick-change lubrication outlets which provide more convenience for the motorist. There is also a greater awareness by the car owner that manufacturers now consider most vehicle use as "severe service," requiring more frequent oil changes. While results of these trends cannot be predicted firmly, they are expected to lead to greater lubricant consumption in the future.

Total volume of lubricants produced and sold is just one factor affecting additive consumption. Equally important is the specification under which these lubricants are sold. Specifications determine the volume of additives required in a particular lubricant formulation. New and more demanding specifications have been under study for several years. The American Petroleum Institute, which issues passenger car motor oil specifications in the United States, issued the new Category SG late in the first quarter of 1988.

SG lubricants are designed for service typical of gasoline engines in passenger cars, vans and light trucks. They will provide a significant increase in motor oil quality and performance, and they will require higher additive treatment levels.

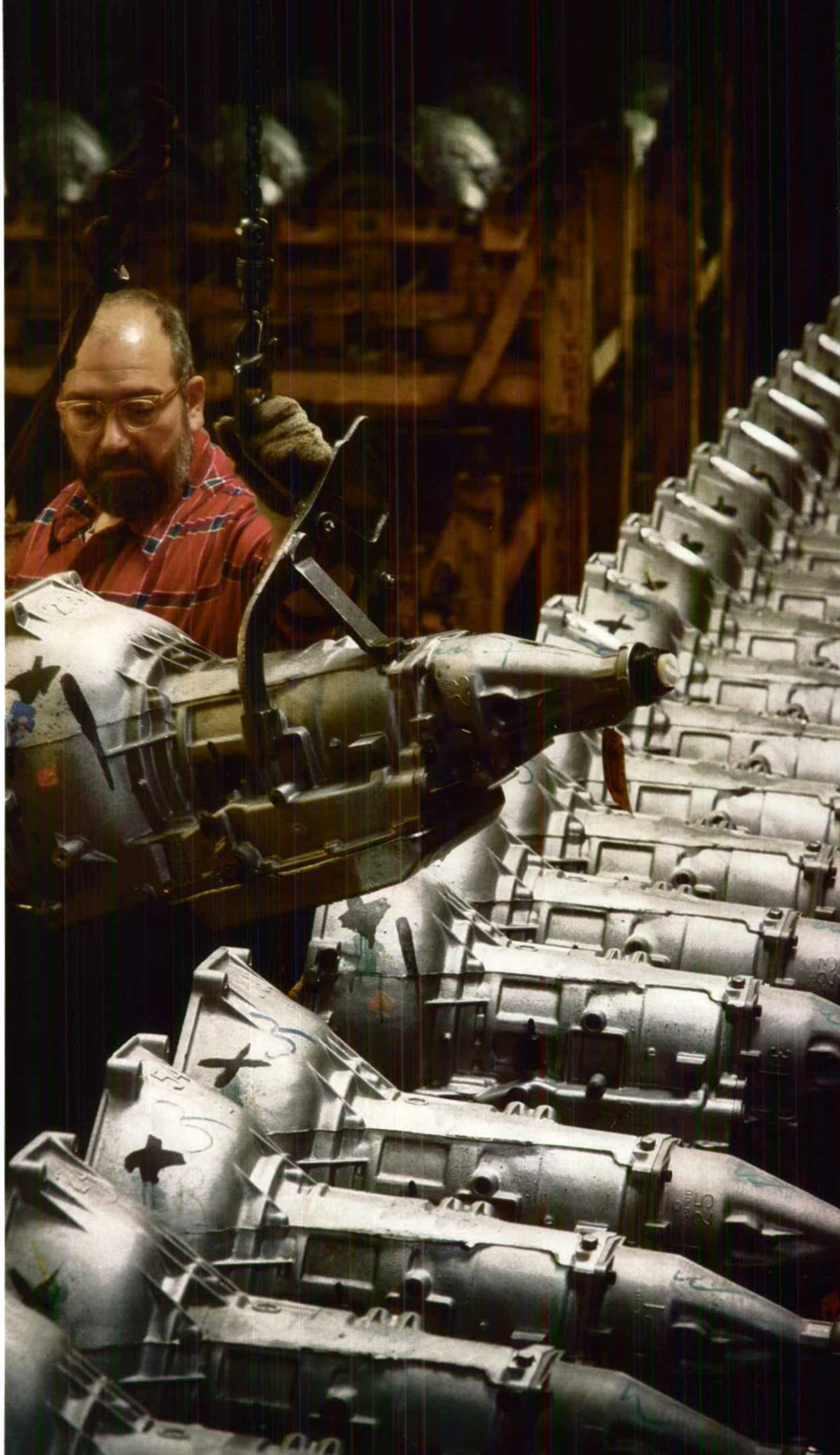
Performance advantages include improved control of deposits, particularly sludge formation, better oxidative and thermal stability, greater resistance to thickening and lower valve train wear. These properties are extremely important to equipment manufacturers, since typical drive train warranties for cars produced in the United States are now six years or 60,000 miles. High quality lubricants, such as API Service Category SG, will greatly assist in providing acceptable performance under these warranties to both the manufacturer and the owner.

Equipment manufacturers will require SG for the 1990 model year. It will be optional for vehicles produced in 1989. European manufacturers are equally interested in improved lubricant quality, and we believe that SG quality oils will achieve general acceptance in this market.

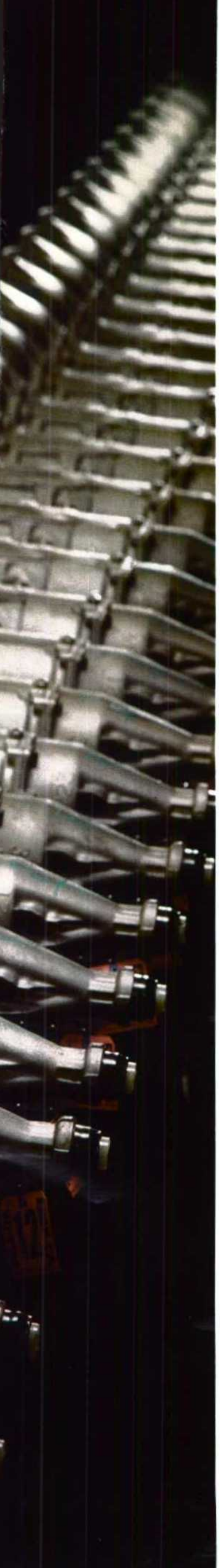
Looking ahead, new materials, concepts, regulations and customer demands are expected to alter passenger car engine design in the future. Studies indicate that at least one-half of the current engine configurations will be redesigned or phased out by 1995. Plastic and ceramic components will find increased use. Supercharging and four valves per cylinder will become more common. Four- and even three-cylinder engines with greater power output will be available. Two-cycle engines are once again being evaluated. The trend toward improved oil quality established by SG will allow engine designers to employ these and other innovations secure in the knowledge that lubricant quality will not be a limiting factor.

Passenger car motor oil specifications will undoubtedly be strengthened in the future to achieve higher levels of performance. Lubrizol's research, development, testing and marketing capabilities will allow us to take maximum advantage of these opportunities.

Equipment builders around the world now require more precise automatic transmission fluid formulations such as the new Ford Mercon® specificiation to provide better shifting characteristics.



Monitored by Lubrizol specialists, truck fleets participated in programs totaling over 20 million miles to confirm the field performance of additives in heavy duty engine oils and fuels.



Heavy Duty Diesel Engine Oil

In April 1987, the American Petroleum Institute issued Service Category CE for heavy duty diesel engine oil. This upgraded specification described a quality lubricant formulated to meet the demands of modern turbocharged or supercharged diesel engines operating under heavy loads and severe conditions. CE provides improved quality, increased performance and requires higher additive treatment levels than previous formulations.

Heavy duty diesel oils represent a significant market for Lubrizol. World demand was strong in 1987, and the estimated growth for finished lubricants is 2% per year. North America is the largest single market and consumes almost one-third of the total world use. Large, mixed, commercial fleets are the major customers. They operate vehicles which range from the largest interstate trucks to light duty trucks, vans and passenger cars. They buy "universal oil" which must meet gasoline engine specifications in addition to diesel performance standards and can be used to lubricate the entire fleet. About 70% of the oils sold for diesel engines in North America have been formulated to meet the previous high level of additive treatment, API CE/SF. The API SG category will become established for passenger cars in early 1988. By the end of this year, these popular universal oils will be reformulated to meet API CE/SG.

API CE and CE/SG are both improvements in oil performance and quality, but many industry observers feel that they are transition specifications and significantly higher performance will be required in the near future. Equipment manufacturers particularly feel that today's oil quality will be insufficient for tomorrow's engines. Some of these manufacturers are already specifying higher levels of quality in the lubricants they recommend. One of the reasons is that longer warranty periods on new engines are becoming standard. Another is that engines designed to produce more power, be more fuel efficient, meet significantly stricter emission standards and give satisfactory warranty performance need improved lubrication.

U.S. federal emission standards are currently in effect for vehicles powered by diesel engines. They are progressive and will become more stringent in the early 1990's. Allowable levels of oxides of nitrogen and particulate matter will be reduced. Lubricating oil that enters the combustion chamber and is burned contributes to particulate emissions. New engines will be designed to reduce this form of oil consumption, but regulations require that this reduction be present for the life of the vehicle. For a Class 8 truck, which is the largest and represents about half of total production, useful life is defined as 290,000 miles. Lubricants must be of extremely high quality and be changed according to manufacturers' recommendations to meet these exacting demands.

For many years, Lubrizol has had a reputation of providing the additive technology that has helped the heavy duty truck industry meet its needs. We are already at work helping manufacturers and others in this industry identify the formulations that will meet the next level of performance.

Automatic Transmission Fluids

Changing conditions in the automatic transmission fluid market suggest that a period of slow growth and static development is coming to an end. A significant change occurred in 1987 when the Ford Motor Company introduced a new service fill category of automatic transmission fluid named Mercon®. Lubrizol's additive technology was the first to receive approval under this new specification.

Ford's initiative is important because field service fluids represent the major portion of the ATF market, as much as 80% of the total used. Ford has adopted a carefully controlled licensing system to establish and monitor compliance with this specification, a system patterned after the successful approach employed by the General Motors Corporation since 1973.

General Motors is developing Dexron III®, a new generation of automatic transmission fluids. This is a complex process, since the fluid must provide satisfactory performance in the full range of cars from subcompact, economy models to full-sized, high performance vehicles. This program is targeted to supply fluids for new models in the early 1990's.

At the heart of these fluid upgrades are characteristics designed to please the driver through good shifting and good driving "feel." The fluid must also possess good durability and have great resistance to wear, enabling the transmission to meet extended manufacturer warranties. The customer has come to expect that the characteristics found in a new car will be maintained throughout the vehicle's life. Consequently, the fluid must have very stable friction characteristics, excellent thermal and oxidative stability, good low temperature performance and improved anti-wear.

Automotive equipment manufacturers in both Europe and Japan have significantly increased their output of cars equipped with automatic transmissions. Close contact with these manufacturers through Lubrizol's engineering liaison offices, coupled with an aggressive research and development program, has enabled us to begin working toward a global class of automatic transmission fluids.

Lubrizol's success in developing the technology required by this industry establishes for us an excellent position from which to further build on our role as the major supplier of automatic transmission fluids.

Business Development Division

Through its three operating groups, Diversified Products, Fuel Products and Industrial Products, this division has responsibility for developing and marketing specialty chemicals for industry. This market-driven, performance-oriented organization has identified specific industry segments for growth. A process has been developed that recognizes customer needs, then marshalls the people, technical and financial resources required to develop and market successful products. Lubrizol's objective is to expand existing business and promote growth into new areas.

Industrial Products Group

Safety is a major consideration in the explosives industry. Emulsion explosives, used in mining and construction, do not require a high explosive sensitizer or chemical and, therefore, exhibit very desirable safety and handling characteristics. In cooperation with a recognized leader in the explosives industry, Lubrizol has developed proprietary emulsifiers and dispersants that meet the needs of these formulations. A combination of dispersant technology, formulation expertise, testing knowledge and field know-how, this technology has brought a new standard of storage stability and field performance to the emulsion explosive business.

Passive Extreme Pressure™ agents were introduced to the metalworking industry in 1986. Field performance is excellent, and the chemical composition of the fluids makes them safer for workers to handle and environmentally acceptable. Additionally, they consistently produce superior surface finishes on metal parts, are non-corrosive to yellow metals, provide rust protection after metalworking, are biodegradable and provide operating economies despite higher initial cost. Lubrizol has been successful in establishing a worldwide base of business in this product line that will serve as a foundation for future growth.

Fuel Products Group

Port Fuel Injection (PFI) additives for gasoline have become standard in the United States with all gasoline marketers actively promoting the quality of their products. Several of the international petroleum companies produce and use proprietary gasoline additives. Lubrizol PFI additives, because of their superior performance, have captured a large share of the non-captive market.

Fuel additives will continue to be a growth business. There is growing concern over the problem of intake valve deposits (IVD) in new cars using unleaded gasoline. This is a more serious problem than injector clogging, since it develops more slowly, often taking 15,000 to 20,000 miles of driving to produce performance and emission problems. At present, there is no known method of cleaning up these deposits once they are formed. Longer warranty periods for drive train components and the Environmental Protection Agency's insistence that new autos meet emission standards for at least 50,000 miles make it imperative that this problem be solved.

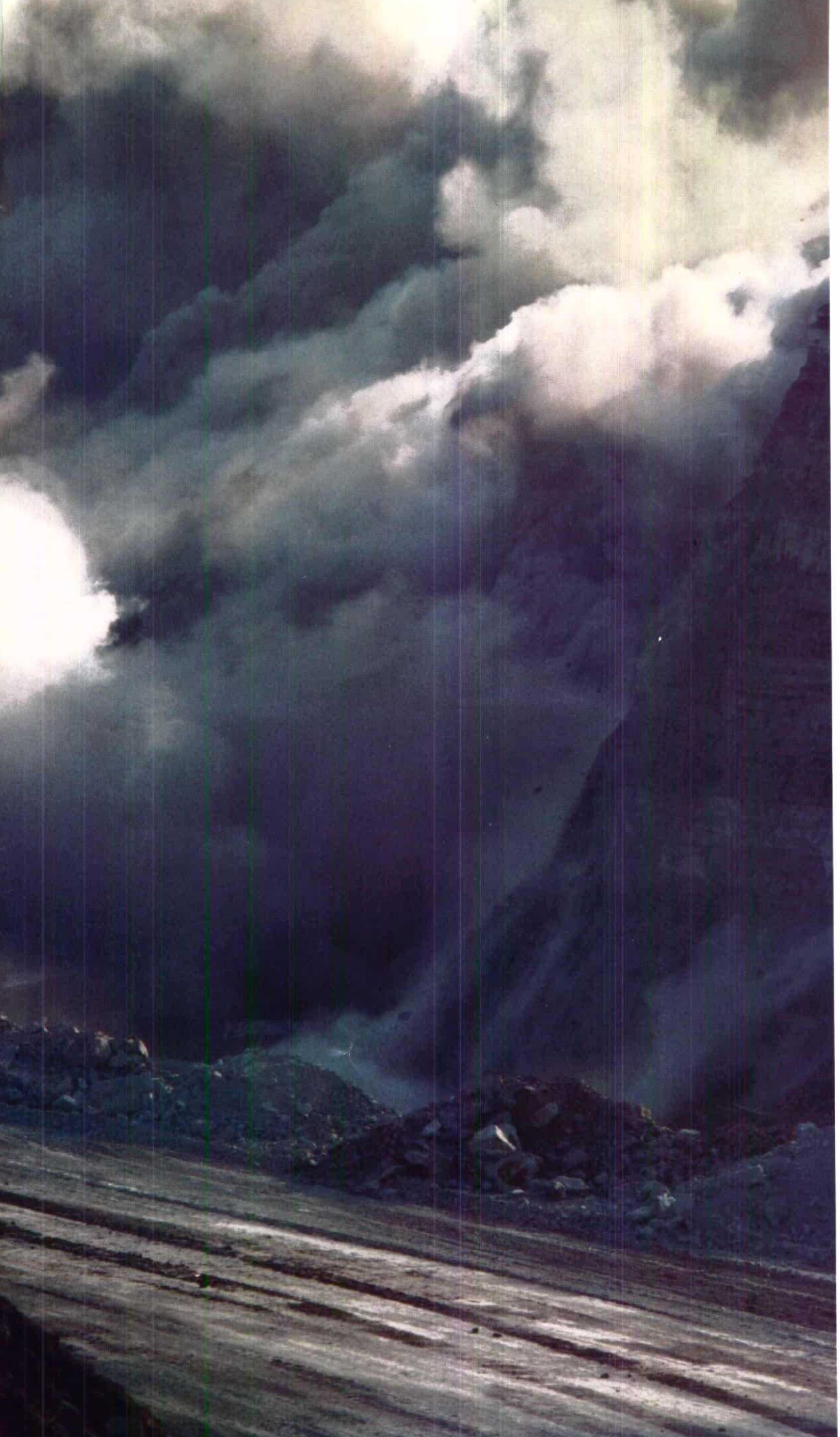
A successful gasoline additive that solves the IVD problem could provide the lead to additional business with the major marketers. By focusing its technical resources on the problem, Lubrizol is working to develop a satisfactory solution.

Diversified Products Group

Growth in performance specialty chemicals is also evident in ore processing in the mining industry, where Lubrizol is marketing its newly developed Flotezol™ ore flotation agents.

Ore flotation is a process used to separate valuable ore from "tailings," the extraneous earthy material that is mixed with the ore as it is mined. The process is accomplished by grinding the mixture of ore and tailings, slurring it with water and introducing air bubbles into the slurry in a flotation machine. The ore particles attach to the air bubbles and are carried to the surface of the mixture while the tailings sink to the bottom. The two layers are separated by skimming off the top layer. Flotezol enhances this process and provides superior recovery and selectivity over conventional reagents. Flotezol can be custom designed and formulated for the flotation of gold, silver, copper, lead, zinc, iron and other sulfide minerals.

Since commercial introduction in early 1987, Flotezol has attracted repeat orders from several of the major mining companies.



Proprietary emulsifiers in Lubrizol's additives for liquid mining explosives promote greater safety and improved handling characteristics in field use.

An auto intake valve heavy with fuel-generated deposits is compared with a clean valve from an engine operated on gasoline containing a Lubrizol additive system for total deposit control.

AGRIBUSINESS

Agrigenetics Corporation

Agrigenetics Corporation has a commercial business in crop seeds and a developing business in specialty vegetable oils. Segment revenues were lower than a year ago primarily due to the government's program to reduce crop surpluses. In addition, a seed division, since sold, contributed $5.5 million in sales in 1986. Segment loss of $4.3 million was principally due to a before-tax charge of $3 million for a write-down of vegetable oil inventory.

Financial Highlights

	In Thousands	
	1987	1986
Revenues	$82,511	$95,962
Research expenses	4,033	5,003
Operating loss	(4,275)	(10,624)

Agrigenetics Corporation has seven seed divisions which are engaged in the development, production and sale of crop seeds and a joint effort in this business with an affiliate in Italy. It also has a division which is responsible for developing a business in specialty vegetable oils.

Crop seed sales accounted for nearly all of the segment revenues of $82.5 million in 1987. Corn represented 50% of seed sales, soybeans 15%, sorghum 14%, sunflowers 10% and seeds for other crops 11%. Export sales were 16% of the total.

Specialty oils are a developing business. In 1986, Agrigenetics obtained a U.S. patent covering high oleic sunflower hybrids. The high oleic content of the oil from these hybrids imparts oxidative stability to the oil, a property which is valuable in commercial cooking to prevent discoloration of the food and to increase its shelf life. The oil is also believed to have health benefits, and a nutritional study seeking to demonstrate these benefits is presently being conducted at a leading university.

The oilseed crop grown two years ago was adversely affected by weather. As a result, some of this oil, which was available for sale in 1987, did not meet the 80% oleic level desired for a high oleic, specialty oil. Therefore, the inventory was written down. A new hybrid was grown for the 1987 crop, and the oil currently being sold meets the desired standard. We have further plans to develop this market, and we are developing other specialty oils.

Research and Production

In its Agribusiness and New Technologies segments, Lubrizol is engaged in extensive research to develop superior crop seeds and specialty oils.

The traditional method of improving plants is through crossbreeding and selection. In this method, two individual plants containing complementary traits are crossed and grown over several generations during which improved plant types are selected.

In addition to plant breeding, we have extensive research in the new biotechnologies, including cell and tissue culture techniques and recombinant DNA technology. DNA was discovered in the 1860's, but little attention was given to this discovery until the 1950's when Crick and Watson ascertained that DNA is in the form of a double helix and made a model of its structure. Since this discovery is the foundation for modern biotechnology, Agrigenetics has adopted the double helix as its corporate symbol.

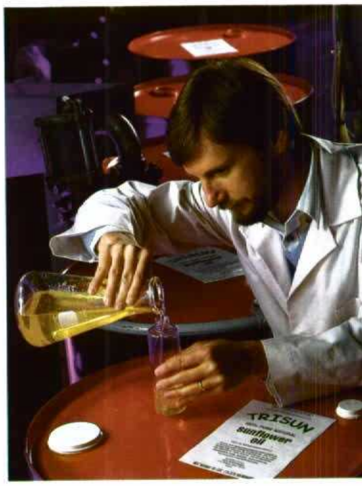
Every form of life is made up of cells. In our cell and tissue research, plant cells or tissues are grown in culture under carefully controlled conditions. The time required to generate and stabilize improved varieties of plants is shortened. In addition, plant variations can be obtained with greater efficiency than through traditional breeding.

Our research concerning recombinant DNA technology relates to the molecular structure of the cell. Every cell contains DNA, a chemical substance which holds the genetic code, or blueprint, for life. Generally, we seek to isolate genes which contain the code for a desired trait and transfer this trait into plant cells so that it will subsequently be expressed in the host plant. This technology, sometimes termed genetic engineering, also permits the beneficial alteration of genes. Through these methods, unique combinations of plant genes can be achieved which would not otherwise be available.

Plant breeding and plant biotechnology techniques are used in combination with one another. An objective in the case of crop seeds is to improve yields. This can be accomplished by improving the plant's resistance to weather stress, insects or disease. Improved nutritional values are also an important consideration. In the case of vegetable oils, a principal objective is to modify the chemical composition of the oil either for nutritional purposes or as a source of industrial specialty chemicals, both for Lubrizol and the market generally.

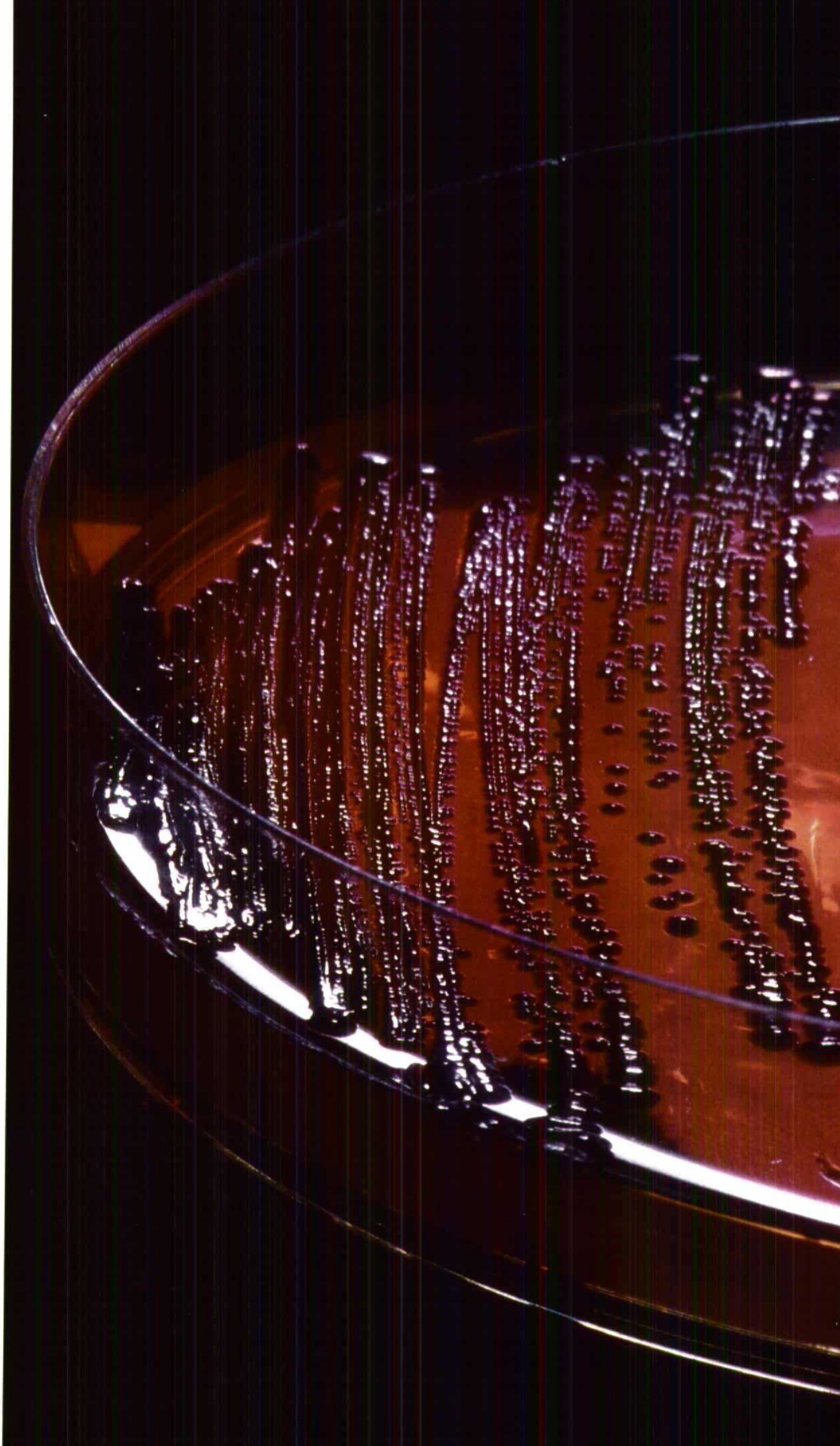
Seeds are the package for the genetic code for plants. Seed production is, therefore, important. Once seed products are developed in research, the plants are grown by farmers under contract with the company's seed divisions. Following harvest, the seeds are conditioned in processing units by the seed divisions and sold to farmers in the next planting season. A principal means of distribution is an organization of more than 10,000 farmer/agents who sell the seed to their neighbors as well as use it in their own planting.

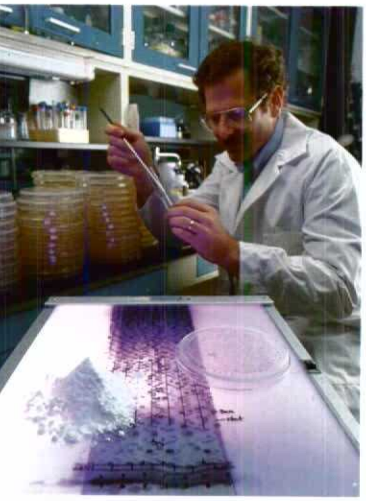
Fields of unique high oleic sunflowers are grown by farmers under contract to Agrigenetics Corporation's seed divisions.



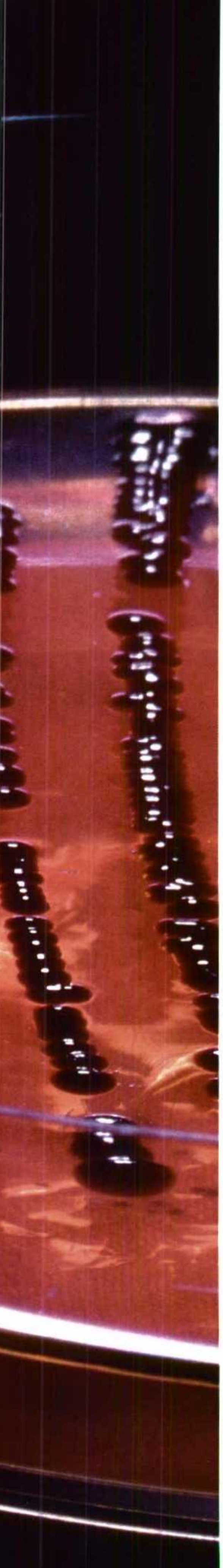
Trisun® high oleic sunflower oil undergoes a quality control check before shipment to customers in commercial and industrial markets.

Lubrizol, through its affiliations with biotechnology companies, is investigating the production of fine chemicals such as food and feed additives, dyes and colorants using microbial species.





Scientists at Genentech, Inc., working on behalf of GLC Associates, are developing a new biological process for manufacturing vitamin C.



NEW
TECHNOLOGIES

Lubrizol Enterprises, Inc.

Lubrizol Enterprises, Inc. is the business unit in this segment. Research expenditures in 1987 were $17.2 million. Before-tax gain on the sale of investments was $21.2 million. A write-off of $7.2 million, before-tax, contributed to a segment loss of $9 million.

Financial Highlights

	In Thousands 1987	1986
Gain on sale of investments	$21,234	$15,637
Research expenses	17,227	10,135
Operating loss	(9,021)	(462)

Lubrizol Enterprises, Inc. is responsible for developing business opportunities for Lubrizol based on new technologies in the biological, chemical and material sciences. Frequently, these activities begin with an investment in a new company seeking to develop a technology of particular interest. Investments have been made in a number of companies, and a list of these is shown in the accompanying table.

From a portfolio standpoint, this has been a successful program. Three of the companies have become publicly-owned, and, at year-end, the market value of these marketable securities exceeded their cost by $260 million. It is believed that the value of the portfolio in the non-public companies has also appreciated. Gain, before-taxes, on the sale of investments in 1987 was $21.2 million.

In addition to these investment activities, Lubrizol Enterprises is developing some attractive product opportunities for Lubrizol. Research programs are a major part of this activity, and the total of such expenditures for 1987 was $17.2 million. The research may be carried out at the new company, at universities or other organizations or, as to certain phases of the work, at Lubrizol. Often, several of these approaches are used in combination. Related technology may also be licensed from others.

Occasionally, a research program is acquired and a new subsidiary is established to engage in that work. During 1987, technology and equipment to develop electro-rheological ("ER") fluids was acquired, and Rheoactive, Inc., a subsidiary of Lubrizol, was established to engage in research and development of these fluids. The principal individuals who had previously been associated with this program joined Rheoactive to continue this work.

ER fluids are mixtures of oil and minute particles which have the property of changing from liquid to solid when voltage is applied. The degree of thickening is proportional to the magnitude of the voltage applied and is reversible. Such fluids have potential applications in a variety of advanced hydraulic mechanisms which are being investigated by equipment manufacturers for possible use as automatic transmissions, clutches, shock absorbers, motor mounts, power steering systems and brake mechanisms.

At present, a major portion of the expenditures in the New Technologies segment is for research programs relating to advanced plant science. In 1985, Lubrizol acquired Agrigenetics Corporation, a plant science and diversified seed company. Several years earlier, Agrigenetics had established a research partnership to fund part of its research, and, in late 1985, Lubrizol acquired the assets of this program. These assets were written off in the fourth quarter of 1987. Funding of this research will continue pending disposition of the assets.

Several years ago, Lubrizol Enterprises helped establish and invested in Sungene Technologies Corporation, an advanced plant science company, and contracted for research at the company. During 1987, Lubrizol Enterprises and Sungene established Sunagra Research, a partnership, to engage in the development of elite germplasm for corn, sunflower and rapeseed using advanced biological techniques. Lubrizol Enterprises, which has an economic interest of 80% in Sunagra, and Sungene will provide a total of $20 million in research funding over a period of three years. Products developed in this research will be sold by Agrigenetics Corporation under a license and marketing agreement with Sunagra.

In early 1987, Lubrizol Enterprises agreed to fund up to $5.4 million in research at Mycogen Corporation over a period of three years. Progress is being made in this research which seeks to isolate novel protein biotoxins and their related genes to impart insect resistance in plants. Sunagra has been licensed as to developments from this program. Last year, Mycogen had an initial public offering of its shares.

GLC Associates, a partnership with Genentech, is continuing development of a new biological process to make vitamin C. The program is on schedule, but the technical benchmarks become increasingly difficult as the project progresses. Provided these are met, initial production is targeted to begin within three years.

Investment Summary

Company	Field	Ownership
Biological Sciences		
Agrigenetics Advanced Science Company Madison, WI	Research in advanced plant science	100%
ChemGen Corporation Rockville, MD	Development of biotransformation processes for producing specialty chemicals	29%
Creative BioMolecules, Inc. Hopkinton, MA	Protein engineering and production systems	27%
Genentech, Inc. South San Francisco, CA	Pharmaceuticals from biotechnology	8%
Lubrizol Genetics, Inc. Wickliffe, OH	Research in advanced plant science	100%
Mycogen Corporation San Diego, CA	Development of biopesticides and bioherbicides	21%
Ocean Genetics, Inc. Santa Cruz, CA	Marine biotechnology to develop and produce specialty chemicals	28%
Sunagra Research Palo Alto, CA	Research in advanced plant science	80%
Sungene Technologies Corporation San Jose, CA	Research in advanced plant science	25%
Syntro Corporation San Diego, CA	Biotechnology to develop animal vaccines and specialty chemicals	11%
Chemical Sciences		
Catalytica Associates Mountain View, CA	Development of new catalysts for producing chemicals	22%
ChemDesign Corporation Fitchburg, MA	Production of custom, fine and specialty chemicals	35%
GLC Associates Wickliffe, OH	Partnership with Genentech, Inc. on new process for vitamin C	50%
Material Sciences		
Altus Corporation San Jose, CA	Lithium battery technology, production and sale of batteries	34%
Greenwich Oil Corporation Dallas, TX	Thermally enhanced oil recovery	16%
Intera Company, Ltd. Cleveland, TN	Technology and specialty chemicals to improve synthetic fibers	32%

Genetically superior proprietary seeds are cultivated under controlled laboratory conditions at Sungene Technologies Corporation.

Large production batches of cultured marine algae grown at Ocean Genetics, Inc. represent a new source of supply for food, food additives, specialty chemicals, pharmaceutical and agrichemical products.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Lubrizol is a specialty chemical company using chemical, mechanical and biological technologies to develop products for world markets in transportation, industry and agriculture. The Transportation & Industry segment, through Lubrizol Petroleum Chemicals Company, develops, produces and sells chemical additives for automotive and industrial lubricants and functional fluids, fuel additives and diversified specialty chemical products. The Agribusiness segment, through Agrigenetics Corporation, develops, produces and sells planting seeds for agricultural and oilseed crops, and develops and markets specialty vegetable oils. The New Technologies segment, through Lubrizol Enterprises, Inc., invests in developing companies and is engaged in research activities utilizing advanced technologies.

RESULTS OF OPERATIONS

Consolidated revenues increased $37 million or 4% in 1987 due to a $50 million or 6% increase in revenues of Transportation & Industry, the company's largest segment. This was partially offset by a $13 million decline in Agribusiness revenues. Gross profit (Sales less Cost of Sales) as a percentage of sales improved 1% to 30% because of improvements in both Transportation & Industry and Agribusiness.

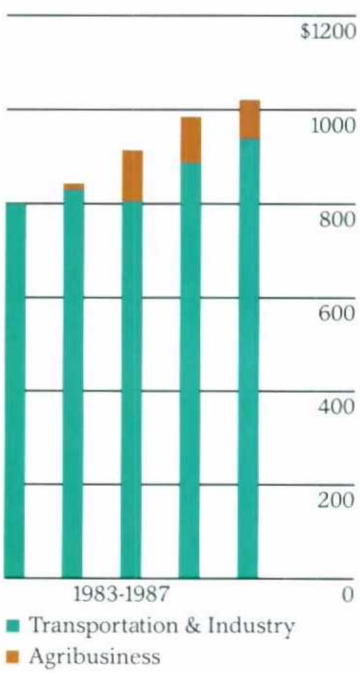
The improved gross profit in 1987 was offset by increased selling and administrative expenses and higher research and development expenses in both Transportation & Industry and New Technologies. This resulted in a slight decrease in 1987 operating income compared to 1986.

An increase in net interest income, due primarily to lower average borrowings, together with a lower effective income tax rate resulted in 4% higher net income. Net income was $81.3 million or $2.06 per share in 1987, compared to $1.97 per share in 1986.

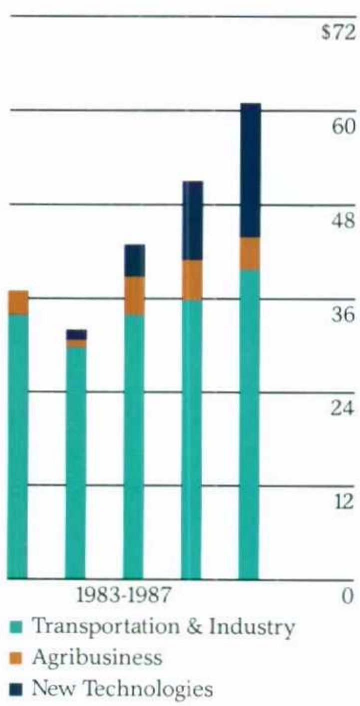
Gain on the sale of investments was $21.2 million ($14.0 million or $.35 per share after tax) in 1987 and $15.6 million ($11.2 million or $.28 per share after tax) in 1986. Intangible research program asset and vegetable oil inventory write-downs were $10.2 million ($6.4 million or $.17 per share after tax) in 1987. In 1986, write-down of assets in the Agribusiness segment and the cost of early retirement programs in the Transportation & Industry segment were $16.7 million ($9.2 million or $.23 per share after tax).

Return on average shareholders' equity was 14% in 1987 and 1986, and 12% in 1985.

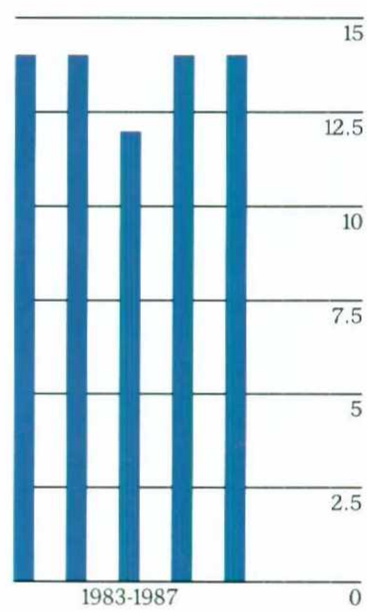
Revenues by Segment
(millions)



Research & Development Expenses
(millions)



Return on Equity
(percent)



OPERATING RESULTS BY BUSINESS SEGMENT

(In Thousands of Dollars)	**1987**	1986	1985
Revenues:			
Transportation & Industry	**$ 939,766**	$889,220	$803,718
Agribusiness	**82,511**	95,962	109,633
Total	**$1,022,277**	$985,182	$913,351
Gross profit:			
Transportation & Industry	**$ 276,138**	$257,248	$205,441
Agribusiness	**24,140**	24,460	38,832
Total	**$ 300,278**	$281,708	$244,273
Research and development expenses:			
Transportation & Industry	**$ 40,278**	$ 36,085	$ 34,128
Agribusiness	**4,033**	5,003	5,452
New Technologies	**17,227**	10,135	3,911
Total	**$ 61,538**	$ 51,223	$ 43,491
Operating income (loss) by business segment:			
Transportation & Industry	**$ 139,533**	$139,632	$102,931
Agribusiness	**(4,275)**	(10,624)	4,921
New Technologies	**(9,021)**	(462)	(5,997)
Total	**$ 126,237**	$128,546	$101,855

In 1986, consolidated revenues increased $72 million or 8% due to an $86 million or 11% increase in revenues of Transportation & Industry. This was partially offset by a $14 million decline in Agribusiness revenues. Revenues in 1985 had increased 8% as revenues generated through the acquisition of Agrigenetics offset a 3% decline in Transportation & Industry.

Gross profit as a percentage of sales in 1986 improved 2% to 29% because of improvement in Transportation & Industry. Selling and administrative expenses increased 13% in 1986 because of higher costs in Transportation & Industry. Research and development expenses increased 18% primarily due to advanced research in plant science in New Technologies.

Net income increased 30% in 1986 to $78.2 million or $1.97 per share, compared to $1.49 per share in 1985. In addition to the improvement in Transportation & Industry operating income, which offset the Agribusiness loss, gain on the sale of investments contributed $15.6 million ($11.2 million or $.28 per share after tax) to income in 1986 compared to $5.4 million ($3.9 million or $.10 per share after tax) in 1985. Net income per share in 1985 had decreased 14% because of the dilutive effect of the acquisition of Agrigenetics and lower Transportation & Industry income.

Transportation & Industry Segment

In 1987, Transportation & Industry revenues, which accounted for 92% of consolidated revenues, increased because of a 4% improvement in volume and the effect of translating stronger foreign currencies into U.S. dollars. The volume increase was broadly based in overseas markets. Higher margin after material costs during the first half of 1987 was partially offset by higher manufacturing expenses, resulting in an increase in gross profit percentage of 1% to 30%. Selling and administrative expenses increased 15% because of increased sales and market development activities, overseas testing and administrative support, including legal expenses and computer system enhancements. Research and development expenses increased 12%. As a result of these factors, operating income of Transportation & Industry in 1987 was the same as 1986.

In 1986, Transportation & Industry revenues increased because of an 8% improvement in volume and the effect of translating stronger foreign currencies into U.S. dollars. Revenues in 1985 had declined 3% on lower overseas volume. In 1986, volume was higher in both the domestic and overseas markets. Lower material costs, higher volume and the effect of the weaker dollar contributed to a 3% increase in the gross profit percentage to 29%. Transportation & Industry gross profit in 1986 was reduced by $6.4 million for costs of early retirement programs in the United States, France and Spain. Selling and administrative expenses increased 16% because of currency effects, higher testing costs and increased administrative support. Research and development expenses increased 6%. A change in the method of accounting for pensions under a new accounting standard reduced expenses by $4.7 million.

As a result of these factors, operating income of Transportation & Industry increased 36% in 1986 after a 7% decline the prior year.

Agribusiness Segment

Agribusiness revenues decreased 14% in 1987 to $83 million because of lower volume resulting from reduced acreage planted by farmers under the U.S. government farm program and loss of revenues from the Sunseeds division which was sold in 1986. Prior to its sale, Sunseeds revenues were $5.5 million in 1986.

Gross profit in 1987 was reduced by $3.0 million for the write-down of vegetable oil inventory to estimated market value since it did not meet the desired standard for a specialty oil. Gross profit in 1986 was reduced by charges of $4.5 million for the write-down of excess seed inventories and $3.0 million for the closing of five seed processing plants in response to, and anticipation of, acreage reductions. Although volume was lower in 1987, gross profit was approximately the same as 1986 because of the reduced effect of unusual items. As a result, gross profit percentage increased from 25% to 29%.

Agribusiness reported a smaller operating loss in 1987 than 1986. While gross profit was the same in both years, reduced marketing expenses attributable to lower volume, and lower administrative and research expenses improved operating results.

In 1986, Agribusiness revenues decreased 12% compared to 1985 because of the sale of the Sunseeds division early in 1986 and lower volume from remaining operations, caused principally by reduced acreage planted by farmers. Gross profit declined 37% because of the inventory and property write-downs discussed above, and lower volume. The gross profit percentage declined to 25% in 1986 from 35% in 1985, with the inventory and property write-downs accounting for eight percentage points of the decline. Agribusiness reported a $10.6 million operating loss in 1986 because of the lower gross profit and a $1.1 million loss on the sale of the Sunseeds division.

New Technologies Segment

New Technologies is a business development and research segment, and does not currently have revenues from product sales. It derives its income from the sale of investments and from equity earnings of non-consolidated companies.

In 1987, New Technologies incurred a $9.0 million operating loss, compared with a $.5 million loss in 1986. Research expenses increased $7.1 million principally in advanced research in plant sciences. Also, 1987 included a $7.2 million write-off of intangible assets in a plant science research program. These increased costs were partially offset by $5.6 million higher gain on sale of investments, which totaled $21.2 million in 1987. The gain was from the sale of shares of Genentech, Inc. At December 31, 1987, the market value of marketable securities owned by this segment exceeded cost by $260 million.

New Technologies incurred a small operating loss in 1986 compared to a $6 million loss in 1985. Gain on the sale of investments was $15.6 million in 1986 compared to $5.4 million in 1985. The gain was principally from the sale of shares of Genentech, Inc. Research expense increased in 1986 principally because advanced research in plant science, which had been partially funded by a limited partnership through 1985, was funded solely by the company in 1986.

WORKING CAPITAL, LIQUIDITY AND CAPITAL RESOURCES

Cash provided from operations during 1987 was $118 million, a decrease of $28 million compared with 1986. The decrease resulted from increased working capital needs in Transportation & Industry and Agribusiness.

The company's financial position continues to be strong. At the end of 1987, the ratio of current assets to current liabilities increased to 3 to 1 from 2.8 to 1 at the end of 1986. Long-term debt as a percent of total capitalization (shareholders' equity plus long-term debt) was 8% at the end of 1987 and 1986.

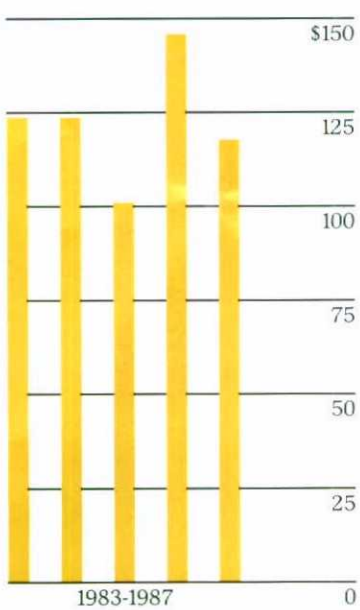
During 1987, working capital needs were financed by internally generated funds, and when needed due to the seasonality of Agribusiness, through the issuance of commercial paper. The company believes its credit facilities and internally generated funds will be sufficient to meet normal working capital and capital investment needs during 1988. The company also believes it has the financial strength to obtain additional credit facilities and other financing as needed.

Capital investments consist of both property additions and equity investments. Property additions, primarily to provide manufacturing, administrative and technical support to Transportation & Industry, are anticipated to be approximately $50 million in 1988.

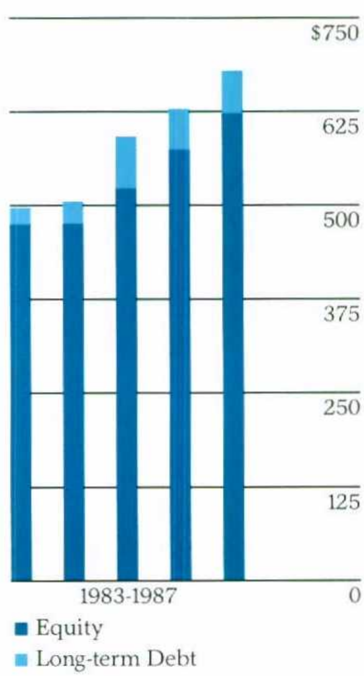
In December 1987, the Financial Accounting Standards Board issued Statement No. 96, Accounting for Income Taxes. As more fully discussed in Note 8 to the financial statements, this pronouncement requires companies to change to the liability method from the deferred method of accounting for income taxes. Companies are required to adopt the Statement by 1989, but may adopt it earlier. Because of uncertainties about future income tax rates and the complexity of worldwide implementation, the company has not decided in which year (1988 or 1989) it will adopt the standard. If adopted in 1988, it is estimated that net income would increase by approximately $13 million by reducing deferred tax liabilities which were established at higher tax rates in prior years. Adoption will not have any other significant effect on the company's financial statements or operations.

The Tax Reform Act of 1986 did not have a material impact on net income for 1987. A significant portion of the company's pretax income is generated outside the United States and therefore is not currently subject to U.S. income taxes. On the portion of income subject to U.S. tax, the benefit of the reduction in the statutory rate in 1987 was largely offset by the repeal of both the investment tax credit and the alternative tax on capital gains, and by an increase in U.S. taxes on repatriated foreign earnings. The provisions of the Act are not expected to have a material impact on the company's working capital, liquidity or net income in future years.

Cash Provided from Operations
(millions)



Capitalization
(millions)



Consolidated Statements of Income

(In Thousands of Dollars Except Per Share Data)	1987	1986	1985
	Year Ended December 31		
Net sales	**$1,013,430**	$976,776	$903,403
Royalties and other revenues	**8,847**	8,406	9,948
Total revenues	**1,022,277**	985,182	913,351
Cost of sales	**713,152**	695,068	659,130
Selling and administrative expenses	**141,698**	129,427	114,867
Research and development expenses	**61,538**	51,223	43,491
Total cost and expenses	**916,388**	875,718	817,488
Other income — net	**20,348**	19,082	5,992
Operating income	**126,237**	128,546	101,855
Interest — net	**2,962**	118	1,590
Income before taxes on income	**129,199**	128,664	103,445
Provision for taxes on income	**47,864**	50,479	43,221
Net income	**$ 81,335**	$ 78,185	$ 60,224
Net income per share	**$ 2.06**	$ 1.97	$ 1.49

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

Consolidated Balance Sheets

(In Thousands of Dollars)	December 31 1987	1986
Assets		
Cash and short-term investments	$ 92,747	$ 85,643
Receivables	198,343	165,386
Inventories	208,184	194,170
Other	14,068	17,783
Total current assets	513,342	462,982
Property and equipment—at cost	704,511	642,189
Less accumulated depreciation	406,938	353,111
	297,573	289,078
Investments in non-consolidated companies	91,074	77,963
Intangible and other assets	37,389	47,884
TOTAL	$939,378	$877,907
Liabilities and Shareholders' Equity		
Short-term debt	$ 13,561	$ 4,303
Accounts payable	91,063	85,713
Income taxes and other current liabilities	64,542	72,781
Total current liabilities	169,166	162,797
Long-term debt	56,138	52,616
Non-current liabilities	23,952	16,806
Deferred income taxes	68,489	73,009
Total liabilities	317,745	305,228
Common shares	77,142	76,476
Retained earnings	541,315	529,428
Accumulated translation adjustment	3,176	(33,225)
Total shareholders' equity	621,633	572,679
TOTAL	$939,378	$877,907

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

Consolidated Statements of Changes in Financial Position

(In Thousands of Dollars)	1987	1986	1985
	Year Ended December 31		
Cash Provided from (Used for):			
Net income	**$ 81,335**	$ 78,185	$ 60,224
Charges to operations not requiring cash:			
Depreciation and amortization	**53,108**	47,807	49,253
Deferred taxes	**(3,670)**	5,523	11,861
Write-down of assets	**10,216**	8,400	3,100
Other, including equity earnings of non-consolidated companies	**(589)**	3,684	7,113
	140,400	143,599	131,551
Change in non-cash working capital:			
Receivables	**(32,957)**	(16,889)	(10,698)
Inventories	**(17,038)**	9,579	(31,449)
Payables and other current liabilities	**(3,460)**	(4,948)	(3,485)
Other current assets	**1,026**	(1,282)	(1,210)
Effect of changes in currency translation rates	**29,933**	16,210	16,739
	(22,496)	2,670	(30,103)
Operations	**117,904**	146,269	101,448
Dividends	**(48,202)**	(46,423)	(46,993)
Capital expenditures	**(42,040)**	(40,460)	(39,498)
Investments in non-consolidated companies, and other acquisitions	**(13,764)**	(11,695)	(19,433)
Acquisition of net assets of Agrigenetics, excluding cash			(45,059)
Sale of division, less non-cash proceeds of $5,758		7,879	
Capital investments	**(55,804)**	(44,276)	(103,990)
Borrowing (repayment) other than acquired Agrigenetics debt:			
Short-term	**9,258**	(27,145)	(30,433)
Long-term	**(250)**	(20,901)	15,353
Issuance of common shares to acquire Agrigenetics			45,360
Common shares issued (purchased)	**(20,580)**	429	(35,921)
Other-net	**4,778**	14,663	6,909
Financing	**(6,794)**	(32,954)	1,268
Increase (Decrease) in Cash and Short-Term Investments	**$ 7,104**	$ 22,616	$ (48,267)

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

Consolidated Statements of Shareholders' Equity

	Number of Shares Outstanding	Shareholders' Equity: Common Shares	Retained Earnings	Accumulated Translation Adjustment
		(In Thousands of Dollars)		
Balance, December 31, 1984	39,110,673	$30,755	$520,288	$(76,700)
Net income for 1985			60,224	
Cash dividends ($1.16 per share)			(46,993)	
Translation adjustment for 1985				22,285
Common shares issued to acquire Agrigenetics Corporation	2,163,629	45,360		
Common shares—Treasury:				
Shares purchased	(1,623,191)	(1,220)	(34,914)	
Shares issued upon exercise of stock options	9,629	213		
Balance, December 31, 1985	39,660,740	75,108	498,605	(54,415)
Net income for 1986			78,185	
Cash dividends ($1.17 per share)			(46,423)	
Translation adjustment for 1986				21,190
Common shares—Treasury:				
Shares purchased	(30,535)	(23)	(939)	
Shares issued upon exercise of stock options	60,603	1,391		
Balance, December 31, 1986	39,690,808	76,476	529,428	(33,225)
Net income for 1987			81,335	
Cash dividends ($1.22 per share)			(48,202)	
Translation adjustment for 1987				36,401
Common shares—Treasury:				
Shares purchased	(777,832)	(637)	(21,246)	
Shares issued upon exercise of stock options	47,846	1,303		
Balance, December 31, 1987	38,960,822	$77,142	$541,315	$3,176

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

Notes to Financial Statements

(In Thousands of Dollars Unless Otherwise Indicated)

Note 1 — Accounting Policies

CONSOLIDATION — The consolidated financial statements include the accounts of the company and its subsidiaries. For non-consolidated companies (affiliates), the equity method of accounting is used when ownership exceeds 20% and the company has the ability to exercise significant influence over the policies of the investee. Other affiliates are carried at cost.

INVENTORIES — Inventories are stated at cost which is not in excess of market. Cost of Transportation & Industry segment inventories is determined by the last-in, first-out (LIFO) method in the United States and the first-in, first-out (FIFO) method overseas. Agribusiness inventory cost is determined by the average cost method.

DEPRECIATION — Accelerated depreciation methods are used in computing depreciation on approximately 72% of the depreciable assets. The remaining assets are depreciated using the straight-line method. For income tax purposes, different methods and rates are used in certain instances. Deferred income taxes relating to these differences have been provided.

FOREIGN CURRENCY TRANSLATION — The assets and liabilities of most overseas subsidiaries are translated into U.S. dollars at exchange rates in effect at the balance sheet date. Operating results are translated at weighted average exchange rates in effect during the period. Net unrealized translation adjustments are recorded as a separate component of shareholders' equity.

PER SHARE AMOUNTS — Net income per share has been computed by dividing net income by the average number of Common Shares outstanding during the year. Net income per share has not been adjusted for the effect of stock options as the dilution effect would be less than 2% in any year.

OPERATING INCOME — In 1987, other income — net is included as a component of operating income. Consolidated statements of income for prior years have been reclassified to be consistent with the 1987 presentation.

Note 2 — Inventories

	1987	1986
Finished products	$ 96,577	$ 71,286
Products in process	58,904	77,705
Raw materials and supplies	52,703	45,179
	$208,184	$194,170

Inventories on the LIFO method at December 31, 1987 and 1986 were 20% and 23% of consolidated inventories. The current replacement cost of these inventories exceeded the LIFO cost at December 31, 1987 and 1986 by $29.5 million and $28.6 million. At December 31, 1987 and 1986, inventories of the Transportation & Industry segment were $145.9 million and $134.4 million, and Agribusiness inventories were $62.3 million and $59.8 million.

Note 3 — Investments in Non-consolidated Companies

	1987	1986
Investments carried at equity	$73,001	$58,863
Investments carried at cost	18,073	19,100
	$91,074	$77,963

Investments carried at equity exceeded the company's equity in the underlying book values by $28.7 million and $26.3 million at December 31, 1987 and 1986. The excess is being amortized over periods not exceeding 20 years.

Investments include marketable equity securities of $23.1 million in 1987 and $16.6 million in 1986. The market value of these securities exceeded the cost by $260 million and $285 million at December 31, 1987 and 1986.

Note 4 — Short-Term and Long-Term Debt

Short-term debt of $13.6 million and $4.3 million at December 31, 1987 and 1986 consisted of short-term bank loans.

Long-term debt consists of:

	1987	1986
7.875% Marine terminal/Industrial development revenue bonds, due 2000	$19,375	$19,375
Term Loans		
7.99% due 1992	20,000	20,000
5.8% yen denominated, due 1993	15,702	12,025
Other (various rates)	1,061	1,216
Total	$56,138	$52,616

At December 31, 1987, the company had a revolving credit agreement and other credit lines aggregating $46 million. These facilities, unused in 1987, would permit the company to borrow at or below the U.S. prime rate.

Interest expense was $6.3 million in 1987, $7.9 million in 1986 and $9.5 million in 1985.

Note 5 — Other Balance Sheet Information

Receivables:	1987	1986
Customers	$162,851	$137,841
Affiliates	22,768	15,398
Other	12,724	12,147
	$198,343	$165,386

Receivables are net of allowance for doubtful accounts of $2.0 million in 1987 and $3.3 million in 1986.

Property and Equipment:	1987	1986
Land and improvements	$ 63,749	$ 58,971
Buildings and improvements	127,678	115,558
Machinery and equipment	495,814	457,532
Construction in progress	17,270	10,128
	$704,511	$642,189

Depreciation expense was $47.2 million in 1987, $42.6 million in 1986 and $44.6 million in 1985.

Accounts Payable:	1987	1986
Trade	$86,959	$76,919
Affiliates	4,104	8,794
	$91,063	$85,713

Income Taxes and Other Current Liabilities:	1987	1986
Income taxes	$15,273	$21,241
Employee compensation	18,861	18,562
Dividends payable	12,576	12,005
Taxes other than income	7,822	7,531
Other	10,010	13,442
	$64,542	$72,781

Note 6 — Shareholders' Equity

There are 2,000,000 shares of serial preferred stock without par value that have been authorized. None of these shares have been issued.

Authorized common stock of the company at December 31, 1987 and 1986 was 120,000,000 and 60,000,000 shares without par value. Outstanding Common Shares were 38,960,822 and 39,690,808 at December 31, 1987 and 1986, after deducting treasury shares of 4,137,125 and 3,407,139.

Notes
continued

In September, 1987 the company adopted a shareholder rights plan under which one right to buy one-half share of the company's common stock was distributed for each share of common stock held. The rights may become exercisable under certain circumstances involving actual or potential acquisitions of 20% or more of the company's common stock by a person or affiliated persons who acquire such stock without complying with the requirements of the company's articles of incorporation. The rights would entitle shareholders, other than such person or affiliated persons, to purchase common stock of the company or certain acquiring persons at fifty percent of then current market value.

Note 7 — Other Income

	1987	1986	1985
Gain on sale of investments	$21,234	$15,637	$ 5,434
Equity earnings of non-consolidated companies	1,474	480	313
Write-off of intangible program assets	(7,192)		
Gains on investee stock issuances	1,776		
Write-down and sale of distribution facilities			(3,100)
Other — net	3,056	2,965	3,345
	$20,348	$19,082	$ 5,992

Note 8 — Income Taxes

Income before taxes on income and the provision for taxes on income consists of the following:

	1987		1986		1985	
	United States	Foreign	United States	Foreign	United States	Foreign
Income before taxes on income	$54,747	$74,452	$54,594	$74,070	$44,680	$58,765
Provision for taxes on income:						
Current	$16,687	$34,847	$ 8,092	$38,843	$ 821	$28,618
Deferred	(3,313)	(357)	5,261	(1,717)	11,000	2,782
	$13,374	$34,490	$13,353	$37,126	$11,821	$31,400

Foreign taxes include withholding taxes. The United States tax provision includes the U.S. tax on foreign income distributed to the company. The differences between the provision for income taxes at the statutory rate (40% in 1987 and 46% in 1986 and 1985) and the tax shown in the consolidated statements of income are summarized as follows:

	1987	1986	1985
Tax at statutory rate	$51,680	$59,185	$47,585
Tax rate differential on capital gains/dividends	(1,550)	(3,639)	(1,194)
Foreign sales corporation earnings	(2,716)	(1,979)	(1,097)
Earnings of non-consolidated companies	(1,481)	(1,180)	(180)
Investment tax credit		(1,102)	(2,515)
Other	1,931	(806)	622
Tax shown in the statement of income	$47,864	$50,479	$43,221

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

	1987	1986	1985
Accelerated depreciation	$ (448)	$ 2,735	$ 7,239
Partnership expense allocations	2,378	3,540	2,182
Intercompany profit in inventory	42	(2,790)	1,214
Prepaid/accrued expenses	(5,376)	614	3,297
Other	(266)	(555)	(150)
	$ (3,670)	$ 3,544	$13,782

Undistributed earnings of subsidiaries and affiliates for which no taxes have been provided were approximately $198 million, $191 million and $207 million at December 31, 1987, 1986 and 1985, respectively. No provision has been made for additional taxes which might result if at some future time such earnings were distributed to the company, as the earnings have been reinvested indefinitely in the operations of the subsidiaries and affiliates, principally for working capital, property and equipment.

As of December 31, 1987, Agrigenetics Corporation (see Note 13) has a net operating loss carryforward of $40 million for federal income tax purposes which expires at various dates from 1990 to 1999. Agrigenetics also has investment and research and development tax credits aggregating $1 million which expire during the period 1994 to 1999. These operating loss and tax credit carryforwards arose prior to the acquisition by

Lubrizol and can be used only to offset the separate taxable income of Agrigenetics. Benefits from utilizing the carryforwards will be accounted for as an adjustment to the allocation of the purchase price.

Statement of Financial Accounting Standards (SFAS) No. 96, Accounting for Income Taxes, was issued in December 1987 and will require the company to change by 1989 to the liability method from the deferred method of accounting for income taxes. SFAS No. 96 allows financial statements for years preceding adoption to be restated or the cumulative effect of the accounting change to be reported in net income in the year of adoption. The company plans to adopt SFAS No. 96 in 1988 or 1989 and to record the cumulative effect of the accounting change in net income in the year of adoption. If adopted in 1988, the company estimates the cumulative effect adjustment would increase net income approximately $13 million by reducing deferred tax liabilities established at higher tax rates in prior years.

Note 9 — Retirement Plans

The company and certain subsidiaries have defined benefit pension plans and a profit sharing plan. Pension benefits are based on years of service, career average compensation and compensation during the last years before retirement. The company's funding policy for pension plans is to contribute amounts sufficient to provide for future benefits and, in the United States, to satisfy Internal Revenue Service funding standards. Plan assets are invested in listed equity securities and fixed income instruments including insurance contracts.

Expense of all retirement plans was $5.0 million in 1987, $4.2 million in 1986 and $8.3 million in 1985, including profit sharing contributions of $2.9 million in 1987 and 1986, and $2.2 million in 1985. The company adopted Statement of Financial Accounting Standards (SFAS) No. 87, Employers' Accounting for Pensions, for its U.S. plans effective January 1, 1986. This reduced 1986 pension cost by $4.7 million. Effective January 1, 1987 SFAS No. 87 was adopted for the company's U.K. plan which reduced 1987 pension cost by $1.1 million.

Cost of pension plans consisted of:

	1987 (U.S. and U.K.)	1986 (U.S. only)
Service cost — benefits earned during the period	$ 4,490	$ 2,726
Interest cost on projected benefit obligation	5,573	3,498
Actual return on plan assets	(4,242)	(10,463)
Net amortization and deferral	(4,906)	3,436
Net periodic pension cost (income)	$ 915	$ (803)

The funded status of pension plans is as follows:

	December 31	
	1987 (U.S. and U.K.)	1986 (U.S. only)
Fair value of plan assets	$103,216	$72,551
Projected benefit obligation	75,420	47,572
Excess of plan assets over projected benefit obligation	27,796	24,979
Unrecognized net gain:		
At initial adoption of SFAS No. 87	(29,734)	(23,052)
Subsequent to adoption	(966)	(1,011)
Unrecognized prior service cost	4,306	
Prepaid pension cost	$ 1,402	$ 916
Actuarial present value of accumulated benefit obligation	$54,511	$30,672
Vested benefits	$ 54,737	$28,685

Weighted-average assumptions used as of December 31 were:

	1987 (U.S. and U.K.)	1986 (U.S. only)
Assumed discount rate	8.3%	7.5%
Assumed rate of compensation increase	6.0%	5.5%
Expected rate of return on plan assets	8.3%	8.0%

SFAS No. 87 has not been adopted for pension plans outside the U.S. and U.K. However, the assets of those plans exceeded the actuarially computed value of vested benefits at December 31, 1987 and 1986.

Health care benefits for retired employees are expensed as paid. The cost was $1.2 million in 1987 and 1986, and less than $1 million in 1985.

Note 10 — Operations in Geographic Areas

Financial data by geographic area, based on the location of the subsidiary which conducted the activity, is as follows:

	United States	Europe	Far East	Other	Eliminations	Consolidated Total
1987						
Revenues	$463,179	$339,403	$110,678	$109,017		$1,022,277
Intercompany transfers	149,809	5,007	18	586	$(155,420)	
Total	$612,988	$344,410	$110,696	$109,603	$(155,420)	$1,022,277
Operating profit	$ 55,822	$ 43,810	$ 14,817	$ 9,795	$ (1,669)	$ 122,575
General corporate expenses						16,686
Other income — net						20,348
Operating income						$ 126,237
Identifiable assets	$483,124	$204,045	$ 96,417	$ 37,090	$ (59,834)	$ 760,842
Corporate assets						178,536
Total assets						$ 939,378
1986						
Revenues	$481,011	$310,018	$ 97,174	$ 96,979		$ 985,182
Intercompany transfers	122,303	4,400		958	$(127,661)	
Total	$603,314	$314,418	$ 97,174	$ 97,937	$(127,661)	$ 985,182
Operating profit	$ 60,606	$ 48,548	$ 11,659	$ 5,977	$ (3,331)	$ 123,459
General corporate expenses						13,995
Other income — net						19,082
Operating income						$ 128,546
Identifiable assets	$486,448	$161,906	$ 78,544	$ 38,739	$ (42,654)	$ 722,983
Corporate assets						154,924
Total assets						$ 877,907
1985						
Revenues	$482,324	$252,324	$ 80,594	$ 98,109		$ 913,351
Intercompany transfers	113,383	7,647	25	1,202	$(122,257)	
Total	$595,707	$259,971	$ 80,619	$ 99,311	$(122,257)	$ 913,351
Operating profit	$ 51,509	$ 37,585	$ 6,742	$ 11,093	$ 2,874	$ 109,803
General corporate expenses						13,940
Other income — net						5,992
Operating income						$ 101,855
Identifiable assets	$507,528	$139,956	$ 78,328	$ 33,715	$ (46,029)	$ 713,498
Corporate assets						140,947
Total assets						$ 854,445

Notes:

A. Intercompany transfers are made at prices comparable to normal unaffiliated customer sales for similar products.
B. Affiliated companies are not allocated to geographic segments.
C. Corporate assets consist of short-term investments and investments in affiliated companies.

Export sales from the United States to customers, primarily in Latin America and Asia, were $99 million in 1987, $93 million in 1986 and $84 million in 1985. The consolidated statements of income include after-tax foreign currency gains of $.5 million in 1987, $.8 million in 1986, and a loss of $.2 million in 1985.

Net assets of non-U.S. subsidiaries at December 31, 1987 and 1986 were $290 million and $236 million, respectively. Net income of these subsidiaries was $40 million in 1987, $37 million in 1986 and $31 million in 1985; and dividends received from the subsidiaries were $33 million, $52 million and $39 million, respectively.

Note 11 — Business Segment Information

A description of the company's segments and a summary of operating results by segment are contained on pages 18 and 19. Following is additional industry segment information:

	Identifiable Assets	Capital Expenditures	Depreciation & Amortization
1987			
Transportation & Industry	$648,947	$40,077	$42,682
Agribusiness	132,271	1,796	7,239
New Technologies	70,697	167	3,187
Corporate Short-term Investments	87,463		
	$939,378	$42,040	$53,108
1986			
Transportation & Industry	$588,847	$37,928	$37,169
Agribusiness	140,254	2,042	7,697
New Technologies	71,845	490	2,941
Corporate Short-term Investments	76,961		
	$877,907	$40,460	$47,807
1985			
Transportation & Industry	$537,618	$34,723	$39,087
Agribusiness	170,903	4,681	7,777
New Technologies	74,685	94	2,389
Corporate Short-term Investments	71,239		
	$854,445	$39,498	$49,253

The company's ten largest customers in the Transportation & Industry segment, most of which are international oil companies and a number of which are groups of affiliated entities, accounted for approximately 41% of consolidated sales in 1987, 40% in 1986, and 39% in 1985.

Note 12 — Employee Stock Options

The 1985 Employee Stock Option Plan provides for the granting of either options intended to qualify as "incentive stock options" under the Internal Revenue Code or "non-statutory stock options" not intended to qualify, up to an aggregate of 1,500,000 shares. Options are granted for terms of up to ten years and are exercisable in cumulative annual increments of 25 percent each year, commencing one year after date of grant. The 1981 Incentive Stock Option Plan was superseded by the 1985 Plan, and the 1975 Employee Stock Option Plan expired in January 1985, although outstanding options under both plans are still exercisable. The option price under all plans is the fair market value of the shares on date of grant. All plans permit or permitted the granting of stock appreciation rights in connection with options. When Agrigenetics was acquired, options outstanding under a stock option plan of that company became fully vested and were converted to options to purchase Lubrizol shares, based on the fair market value of Lubrizol shares.

Information regarding these option plans is as follows:

	Number of Shares		
	1987	1986	1985
Outstanding, January 1	628,680	553,471	516,050
Granted at $21.94 to $39.74 per share	145,300	136,062	44,250
Exercised at $18.63 to $32.13 per share	(69,195)	(60,603)	(75,862)
Expired at $20.50 per share			(19,900)
Surrendered at $18.63 to $32.13 per share	(10,889)	(250)	(21,000)
Assumed in Agrigenetics acquisition at $23.38 to $39.74 per share			109,933
Outstanding, December 31	693,896	628,680	553,471
Exercisable, December 31	391,990	327,252	334,006
Available for grant, December 31	1,185,277	1,319,688	1,455,750

At December 31, 1987, there were stock appreciation rights outstanding relating to options for 20,000 shares, all of which were granted under the 1975 Plan.

The 1975 Plan options expire through November 1994, with an average option price of $22.93. The 1981 Plan options expire November 1991 to November 1994, with an average option price of $22.65. The Agrigenetics options expire December 1991 to July 1994, with an average option price of $31.62. The 1985 Plan options expire June 1995 to November 1997, with an average option price of $28.71.

Note 13 — Acquisition

Effective January 1, 1985, the company acquired all of the outstanding common stock of Agrigenetics Corporation in exchange for 2,163,629 Lubrizol Common Shares. Agrigenetics' results of operations have been included in the company's financial statements from January 1, 1985. Agrigenetics is a diversified seed and genetic research company engaged in the development, production and marketing of agricultural crop seeds and related products.

The acquisition has been accounted for as a purchase. Accordingly, the purchase price of $45.1 million has been allocated to the assets and liabilities acquired based upon their estimated fair value at the date of acquisition. The excess of the total acquisition cost over the fair value of net assets acquired (goodwill) of $20.9 million is being amortized on a straight-line basis over 25 years.

Opinion of Independent Auditors

Deloitte Haskins+Sells

To the Shareholders and Board of Directors
The Lubrizol Corporation:

We have examined the consolidated balance sheets of The Lubrizol Corporation and its subsidiaries as of December 31, 1987 and 1986 and the related consolidated statements of income, shareholders' equity and changes in financial position for each of the three years in the period ended December 31, 1987. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, such consolidated financial statements present fairly the financial position of the companies at December 31, 1987 and 1986 and the results of their operations and the changes in their financial position for each of the three years in the period ended December 31, 1987 in conformity with generally accepted accounting principles applied on a consistent basis.

Deloitte Haskins + Sells

Cleveland, Ohio
February 22, 1988

Quarterly Financial Data
(Unaudited)

	Three Months Ended			
	March 31	June 30	Sept. 30	Dec. 31
1987				
Net sales:				
Transportation & Industry	$227,064	$235,884	$232,822	$235,149
Agribusiness	45,201	29,332	1,435	6,543
Total	$272,265	$265,216	$234,257	$241,692
Gross profit (loss):				
Transportation & Industry	$ 67,771	$ 72,491	$ 68,278	$ 67,598
Agribusiness	17,825	12,663	(1,900)	(4,448)
Total	$ 85,596	$ 85,154	$ 66,378	$ 63,150
Net income	$ 25,975	$ 23,779	$ 18,913	$ 12,668
Net income per share	$.65	$.60	$.48	$.33
1986				
Net sales:				
Transportation & Industry	$214,700	$228,688	$229,040	$208,386
Agribusiness	60,194	30,290	1,297	4,181
Total	$274,894	$258,978	$230,337	$212,567
Gross profit (loss):				
Transportation & Industry	$ 56,289	$ 68,432	$ 71,390	$ 61,137
Agribusiness	24,402	9,750	(6,574)	(3,118)
Total	$ 80,691	$ 78,182	$ 64,816	$ 58,019
Net income	$ 28,079	$ 18,952	$ 17,701	$ 13,453
Net income per share	$.71	$.48	$.44	$.34

Most of the sales of the Agribusiness segment are made during the first half of the year, and operating losses are incurred in the third and fourth quarters as a result of incurring operating expenses with low sales. Agribusiness' cost of sales includes certain period costs and, therefore, may exceed sales in a quarter which has low volume.

Net income per share reported above includes the following gains (losses):

	Three Months Ended			
	March 31	June 30	Sept. 30	Dec. 31
1987				
Gain on sale of investments	$ .10	$ .08	$ .09	$ .08
Write-off of intangible program assets				(.12)
Vegetable oil inventory write-down				(.05)
1986				
Gain on sale of investments	$ .27			$ .01
Agribusiness asset write-down & loss on sale of division		$(.02)	$(.07)	(.05)
Early retirement programs	(.03)			(.06)

Ten Year Summary

(In Thousands of Dollars Except Per Share Data)	1987	1986	1985
Summary of Operations			
Revenues	$1,022,277	$985,182	$913,351
Cost of sales	713,152	695,068	659,130
Selling, administrative & research expenses	203,236	180,650	158,358
Total cost and expenses	916,388	875,718	817,488
Other income (charges)	23,310	19,200	7,582
Income before taxes on income	129,199	128,664	103,445
Provision for taxes on income	47,864	50,479	43,221
Net income	$ 81,335	$ 78,185	$ 60,224
For the Year:			
Net income per share	$ 2.06	$ 1.97	$ 1.49
Dividends declared per share	1.22	1.17	1.16
Average Common Shares outstanding (in thousands)	39,559	39,678	40,409
Consolidated Statement of Financial Position			
Current assets	$ 513,342	$462,982	$447,441
Current liabilities	169,166	162,797	182,543
Working capital	344,176	300,185	264,898
Property and equipment — net	297,573	289,078	290,298
Other assets	128,463	125,847	116,706
Total	770,212	715,110	671,902
Less:			
Long-term debt	56,138	52,616	73,444
Non-current liabilities	23,952	16,806	13,161
Deferred income taxes	68,489	73,009	65,999
Net assets — Shareholders' equity	$ 621,633	$572,679	$519,298
Other Data			
Return on average shareholders' equity	14%	14%	12%
Total assets	$ 939,378	$877,907	$854,445
Capital investments	55,804	52,155	103,990
Depreciation	47,229	42,591	44,605
At End of Year:			
Number of employees	4,817	4,802	5,205
Number of shareholders	8,335	9,240	10,803
Common Shares outstanding (in thousands)	38,961	39,691	39,661
Shareholders' equity per share	$ 15.96	$ 14.43	$ 13.09

1984	1983	1982	1981	1980	1979	1978
$844,175	$800,303	$812,247	$899,161	$922,697	$741,518	$595,257
627,378	588,266	610,717	653,748	644,080	511,038	404,473
114,501	113,363	107,470	96,006	86,980	73,135	66,579
741,879	701,629	718,187	749,754	731,060	584,173	471,052
12,788	15,032	(6,739)	8,168	3,575	2,489	12,243
115,084	113,706	87,321	157,575	195,212	159,834	136,448
47,353	48,962	39,760	65,544	83,701	69,059	59,083
$ 67,731	$ 64,744	$ 47,561	$ 92,031	$111,511	$ 90,775	$ 77,365
$ 1.73	$ 1.65	$ 1.21	$ 2.36	$ 2.87	$ 2.33	$ 1.97
1.12	1.08	1.08	1.08	.90	.80	.70¼
39,138	39,195	39,192	38,986	38,850	38,952	39,176
$376,050	$361,964	$304,542	$341,825	$346,001	$303,008	$278,226
132,252	129,766	115,255	129,696	136,835	116,304	95,939
243,798	232,198	189,287	212,129	209,166	186,704	182,287
251,735	274,337	288,504	284,088	248,664	180,405	150,019
74,189	46,563	50,698	47,252	56,472	36,529	13,490
569,722	553,098	528,489	543,469	514,302	403,638	345,796
30,416	27,213	19,428	25,268	22,846		
11,480	10,038	8,961	8,829	13,653	10,041	8,346
53,483	44,326	38,056	30,854	25,016	18,846	14,414
$474,343	$471,521	$462,044	$478,518	$452,787	$374,751	$323,036
14%	14%	10%	20%	27%	26%	26%
$701,974	$682,864	$643,744	$673,165	$651,137	$519,942	$441,735
49,001	27,961	64,044	77,214	99,403	74,611	47,610
38,723	37,038	37,168	32,068	23,414	18,406	15,256
4,176	4,165	4,322	4,237	4,155	3,905	3,803
10,804	11,277	10,615	9,986	9,004	8,305	8,502
39,111	39,195	39,195	39,946	39,863	39,750	40,002
$ 12.13	$ 12.03	$ 11.79	$ 11.98	$ 11.36	$ 9.43	$ 8.08

Officers and Directors

Directors

L. E. COLEMAN
Chairman of the Board and Chief Executive Officer

W. G. BARES
President and Chief Operating Officer

ANDRE GILLET
Chairman and Chief Executive Officer, International Multifoods Corporation, a diversified food company

THOMAS C. MacAVOY
Director and Retired Vice Chairman of the Board of Corning Glass Works, a diversified glass and glass products company

RICHARD A. MILLER
President and a Director of Centerior Energy Corporation, holding company for two electric utilities, The Cleveland Electric Illuminating Company and The Toledo Edison Company

DAVID T. MORGENTHALER
Managing Partner, Morgenthaler Ventures, a private investment firm specializing in venture capital activities

LEWIS S. SALTER
Chancellor, Wabash College

RENOLD D. THOMPSON
President, Chief Executive Officer and a Director of Oglebay Norton Company, a raw materials and Great Lakes marine transportation company

KARL E. WARE
Chairman and Chief Executive Officer of Ware Industries, Inc., a company which designs, manufactures and markets a broad range of specialty wire forms and steel components

Honorary Director

F. ALEX NASON
Founder of the Company

Officers

L. E. COLEMAN
Chairman of the Board and Chief Executive Officer

W. G. BARES
President and Chief Operating Officer

PHILIP L. KRUG
Executive Vice President

W. T. BEARGIE
Senior Vice President - Finance

GEORGE R. HILL
Senior Vice President - Research and Development

ROGER Y. K. HSU
Senior Vice President - Law

WILLIAM D. MANNING
Senior Vice President

ROBERT W. SCHER
Senior Vice President

JEAN-POL ARZUL
Vice President

DONALD L. MURFIN
Vice President

DOUGLAS W. RICHARDSON
Vice President

RAY A. ANDREAS
Corporate Controller

J. R. COOPER
Controller — Financial Services

WILLIAM R. JONES
Treasurer

J. I. RUE
Secretary

Transfer Agent, Registrar, and Dividend Disbursing Agent

National City Bank
P.O. Box 92301
Cleveland, Ohio 44193-0900
(216) 575-2529

Annual Meeting

The Annual Meeting of Shareholders will be held at the offices of The Lubrizol Corporation on Monday, April 25, 1988.

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 without charge upon written request to the Secretary of the Corporation.

Shareholder Information

The Common Shares of The Lubrizol Corporation are listed on the New York Stock Exchange under the symbol LZ. The number of shareholders of record of Common Shares was 8,317 as of February 10, 1988.

The Lubrizol Corporation

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

Transportation & Industry

Principal Subsidiaries

Lubrizol A.G. (Switzerland)
Lubrizol Australia
Lubrizol of Canada Limited
Lubrizol de Chile Limitada
Lubrizol Eastern Pacific Limited (Hong Kong)
Lubrizol Española, S.A.
Lubrizol France S.A.
Lubrizol Gesellschaft m.b.H. (Austria)
Lubrizol G.m.b.H. (West Germany)
Lubrizol Great Britain Limited
Lubrizol International, Inc.
Lubrizol Italiana S.p.A.
Lubrizol Japan Ltd.
Lubrizol Limited (England)
Lubrizol de Mexico, S. de R.L.
Lubrizol S.A. (Belgium)
Lubrizol Scandinavia AB
Lubrizol Servicios Tecnicos S. de R.L. (Mexico)
Lubrizol South Africa (Proprietary) Limited
Lubrizol Southeast Asia (Pte.) Ltd. (Singapore)
Nippon Lubrizol Industries Corporation (Japan)

Affiliates

Industria de Aditivos do Brasil S.A.
Lubrizol India Limited
Industrias Lubrizol S.A. de C.V. (Mexico)
Lubrizol Transarabian Company Limited (Saudi Arabia)
C.A. Lubricantes Quimicos L.Q. (Venezuela)

Manufacturing Plants

Painesville, Ohio
Bayport, Texas
Deer Park, Texas

Sydney, Australia
Rio de Janeiro, Brazil
Niagara Falls, Canada
Bromborough, England
LeHavre, France
Rouen, France
Bombay, India
Kinuura, Japan
Apodaca, Mexico
Yanbu, Saudi Arabia
Jurong, Singapore
Durban, South Africa
Huelva, Spain
Valencia, Venezuela

Laboratories

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

Agribusiness

Subsidiary

Agrigenetics Corporation
Eastlake, Ohio

Seed Divisions

AgriGene
Des Moines, Iowa
GroAgri Seed
Lubbock, Texas
Jacques Seed
Prescott, Wisconsin
McCurdy Seed
Fremont, Iowa
Sigco Research
Breckenridge, Minnesota
Taylor-Evans Seed Company
Tulia, Texas
R. C. Young and Company
Lubbock, Texas

Specialty Vegetable Oil Division

SVO Enterprises
Eastlake, Ohio

Affiliate

Helizea-Agrigenetics S.p.A.
Ferrara, Italy

New Technologies

Subsidiaries

Lubrizol Enterprises, Inc.
Wickliffe, Ohio
LEI Holdings, Inc.
Wilmington, Delaware