THE LUBRIZOL CORPORATION
ANNUAL REPORT
1986

Lubrizol

THIS IS LUBRIZOL

Lubrizol is a specialty chemical company using chemical, mechanical and biological technologies to develop products for world markets in transportation, industry and agriculture. The company employs 4,800 men and women in its plants, offices and laboratories around the world.

In Transportation and Industry, Lubrizol is a leading developer of specialty chemicals for lubricants and fuels. These chemical additives are sold to oil companies in over 100 countries to improve motor oils, automatic transmission fluids, gear oils and other automotive, industrial and marine lubricants, in addition to gasoline and diesel fuels. Lubrizol also makes diversified specialty chemicals for industry.

In Agribusiness, Lubrizol, through its subsidiary, Agrigenetics Corporation, is engaged in the development, production and sale of seeds for agricultural crops and specialty vegetable oils and their chemical derivatives. Advanced plant science such as biotechnology is being utilized for this purpose.

In New Technologies, Lubrizol, through its subsidiary, Lubrizol Enterprises, Inc., is investing in and developing new business opportunities relating to specialty chemicals through the application of advanced technologies in the biological, chemical and material sciences.

FINANCIAL HIGHLIGHTS

(In Thousands of Dollars Except Per Share Data)	**1986**	1985	Increase (Decrease)
Revenues	**$985,182**	$913,351	8%
Net income	**78,185**	60,224	30
Net income per share	**1.97**	1.49	32
Dividends per share	**1.17**	1.16	1
Capital investments	**52,155**	103,990	(50)
Research and development expenses	**51,223**	43,491	18
Shareholders' equity	**572,679**	519,298	10
Total assets	**877,907**	854,445	3

Common Share Price History

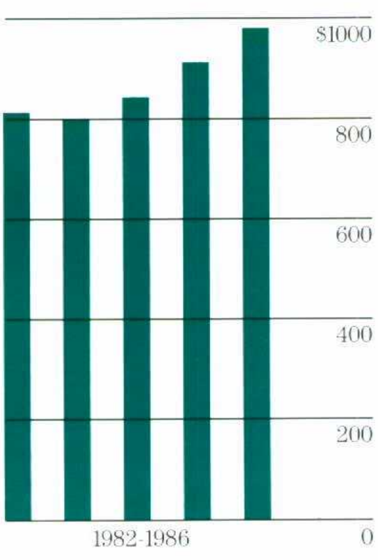
	1986		1985	
	High	Low	High	Low
1st quarter	31 3/8	25 5/8	25 7/8	20 3/4
2nd quarter	35 1/8	26 5/8	23 1/2	20 1/8
3rd quarter	34 3/8	25 3/4	24 3/8	19 7/8
4th quarter	35 1/8	28 1/4	28 7/8	19 3/4

Dividends per Common Share

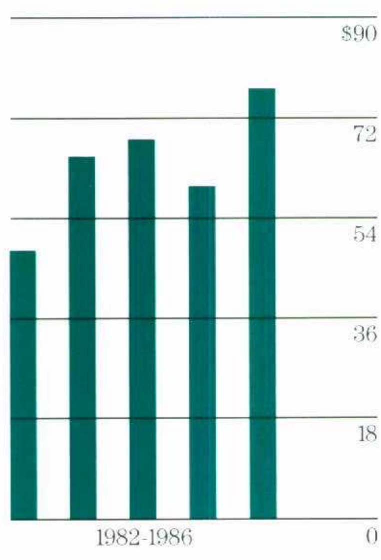
	1986	1985
1st quarter	$ .29	$ .29
2nd quarter	.29	.29
3rd quarter	.29	.29
4th quarter	.30*	.29
Total	$1.17	$1.16

**Paid January 2, 1987*

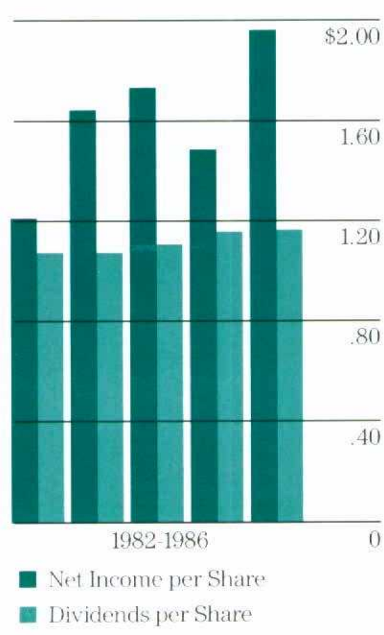
Revenues
(millions)



Net Income
(millions)



Net Income per Share/
Dividends per Share



TO OUR SHAREHOLDERS

We are pleased to report that 1986 was a very good year for Lubrizol. Consolidated revenues increased 8%. Consolidated net income rose 30%, and net income per share was $1.97. Additive shipments increased 8%.

Consolidated net income for 1986 included a gain on the sale of investments of $11.3 million, or 28 cents per share, and charges of $9.2 million, or 23 cents per share. The charges were principally for a write-down of assets in the agribusiness segment and the cost of early retirement programs.

Broadening Our Base

For some years, Lubrizol has been broadening the base of its business. Our purpose in doing so is to create value for the shareholder. In addition to reporting on developments in 1986, we believe a report on how the company is progressing in this regard would be both timely and appropriate.

Not too many years ago, Lubrizol was regarded as a "one-product company." That was not quite true, of course. The lubricant additive field is surprisingly diverse. Nevertheless, the company was also in a strong financial condition, and this combination often led to the question of whether any acquisitions were contemplated.

We had adopted a general policy on this subject. Friendly acquisitions were to be investigated, but a preference was expressed for diversifying through research. In keeping with this concept, a polymer research laboratory was initiated in 1966.

A number of candidates for possible acquisition were screened, but there were two obstacles. One was that for a period of 16 consecutive years up to the 1982 recession, Lubrizol had achieved a return on equity of 20% or more. Matching that record in an acquisition was difficult. The other obstacle was that it became increasingly apparent that our main strength was in specialty chemicals, and we had little interest in other fields.

A modest acquisition was made in 1973 with the intention of achieving a critical mass in Lubrizol's business in metal finishing chemicals. During the "oil crisis" in the 1970's, an investment was made in enhanced oil recovery, primarily as a hedge on supplies. The oil shortage itself raised additional concerns as to our dependence on lubricant additives.

New Technologies

While the events concerning the oil crisis were important, the principal development concerning these matters occurred in another area. In the 1970's, biotechnology was beginning to emerge from the laboratory, and companies were being established to develop commercial applications. Lubrizol was very interested in the technology and its implications for our business. Biotechnology and chemistry have a great deal in common. The idea of broadening our base by diversifying our research remained valid, and a study was made of this field.

In 1979, this led to an investment in Genentech, Inc. and the establishment of a relationship with that company. During the past ten years, we have invested in and established working relationships with some 15 companies engaged in different aspects of biotechnology and other emerging technologies. These activities now comprise the New Technologies segment of Lubrizol, and they are managed in a wholly-owned subsidiary, Lubrizol Enterprises, Inc.

Lubrizol Enterprises' assignment is to create business opportunities based upon advanced technologies relating to specialty chemicals. Seen from an operating standpoint, most of these activities are in an early stage. These are new fields and, as might be expected, a significant portion of Lubrizol Enterprises' budget is for research. From an investment standpoint, however, they have already been a success. At year end, the market value of marketable securities exceeded their cost by $285 million.

Agribusiness

In 1985, Lubrizol acquired Agrigenetics Corporation, a major developer, producer and marketer of planting seeds for agricultural crops. On the face of it, that might seem to be a departure. Conceptually, however, there is little difference. The focus is again on research, in this case, advanced plant science.

The parallels would be easier to see if these activities had remained part of Lubrizol Enterprises. Prior to the acquisition of Agrigenetics, Lubrizol Enterprises had invested in an advanced plant science company, acquired two small seed companies and established a subsidiary to market specialty vegetable oils. Progress in these activities made it apparent that further investments or acquisitions were needed to augment the research and the distribution. Agrigenetics offered both. With the exception of advanced plant research, which is managed by Lubrizol Enterprises along with other advanced research, these activities now comprise Lubrizol's Agribusiness segment.

Our purpose in agribusiness is to develop superior seeds and specialty vegetable oils and their chemical derivatives, using advanced plant science such as biotechnology to do so. Seeds are the storehouse of the genetic information which governs the traits of the plant. Seed companies provide not only the

L. E. Coleman

W. G. Bares

means of testing and improving laboratory developments through conventional plant breeding, but also the means of producing and delivering the improvements to the marketplace.

Our progress in agribusiness should be viewed on two different levels. We are pleased with the initial developments. Our first major production of high oleic sunflower oil will enter the market this year. We are developing and test-marketing chemical derivatives of this oil. We are investigating other oilseeds. On the other hand, we are in a transition from general seed operations to the specialized agribusiness, and segment losses in 1986 were \$10.6 million. This included charges of \$10.3 million, principally for the write-down of assets. Cash flow was \$21 million, about half of which was from operations and half from the sale of assets.

As expected, structural changes have been necessary. The main problem, however, has been the farm economy. Our general seed operations are exposed to that risk, but we expect the risk to lessen as we become more specialized. Our goal for 1987 is to reach at least the break-even level in these operations and to maintain positive cash flow.

Transportation & Industry

Any review of these new areas is in danger of overlooking a central fact. The past year was a successful one for Lubrizol because of a strong performance in Transportation & Industry, the principal segment of our business. Interestingly, our "one-product" — lubricant additives — led the way. Return on equity for the company as a whole was 14%. This included a negative return on some of our new activities. Return on equity in the Transportation & Industry segment was 24%, a remarkable performance.

While we have been developing these new activities, we have also been strengthening our business in Transportation & Industry. Improvements have been made in productivity. We have sharpened our focus by dividing the business into particular markets and developing business plans for each of these. In addition, several years ago, we established a new division within this segment to develop and focus greater attention on additives for industrial lubricants, fuel additives and diversified specialty chemicals, and its contributions are being seen. We continue to believe there are excellent opportunities in the Transportation & Industry segment, and it, in all of its aspects, will continue to receive a major priority.

In summary, we seek to make a variety of specialty chemicals in a variety of ways for a number of end uses. We seek to broaden our base. Much of the structure to accomplish this is in place. Additional progress was made in 1986, both in our established business and in our new activities. There is a cost involved in starting these new activities, the same as with any new business. One of the principal assignments for our management is to make a continual appraisal of the cost relative to the performance and to make such changes as may be needed. That is inherent in our goal of creating value over the long term.

Executive Developments

During 1986, Paul L. Carll retired as Vice President and Assistant to the President after 40 years of service. Robert W. Scher was elected Senior Vice President — International succeeding W. Anthony Snell, who is retiring after long service, but will continue as a consultant. John A. Studebaker, who has an extensive background in agribusiness, was made President and Chief Executive Officer of Agrigenetics Corporation.

We regret to advise that Ralph S. Tyler, Jr., former Chairman, died on August 3, 1986, at age 80. Mr. Tyler, a leading corporate lawyer, joined Lubrizol when it was going public and made extensive contributions in those activities, its international activities, and the general management of its business.

L. E. Coleman
Chairman of the Board

W. G. Bares
President

March 18, 1987

SPECIALTY CHEMICALS/ TRANSPORTATION & INDUSTRY

Specialty Chemicals for Transportation & Industry had a very successful year in 1986. Units shipped, revenues and segment income all showed sharp improvement from the previous year. Research and development activities continued at a high level, with product introductions in all areas of this segment. Improvements in lubricant standards are expected in 1987. These will require new additive systems and represent an opportunity for increased business.

Financial Highlights

Transportation & Industry	In Thousands 1986	1985	Increase
Revenues	$889,220	$803,718	11%
Research expenses	36,085	34,128	6%
Segment income	139,632	102,931	36%

Increased sales of lubricant and fuel additives in 1986 reflected improved economic conditions and greater interest by the end user in the equipment protection and improved performance provided by these products. Units shipped were up 8%.

Lubrizol's commitment to research remains a primary strength. Consolidated research expenses for 1986 were $51 million, or 5% of revenues. Technical service costs, principally mechanical testing to qualify customers' lubricants for various standards, were an additional $28 million.

Approximately 70% of the research expenses, or $36 million, were for the development of products for Transportation & Industry. In anticipation of the new standards which are expected in 1987, development of additive systems for passenger car and heavy duty motor oils received principal emphasis. Innovation in the Transportation & Industry segment continues at a fast pace. More than 50% of the additives we presently sell are based on products developed during the past five years.

Lubrizol's additive systems are sold to oil companies and lubricant compounders in more than 100 countries. Below is a geographic distribution of 1986 sales:

United States	34%
Europe	32%
Asia	12%
Latin America	8%
Other Areas	14%

Demand for the improved performance and longevity of automotive and industrial equipment which additives afford continues to grow. As a result, consumption of specialty chemical additives has increased at a faster pace than that of lubricants themselves. We expect this trend to continue as improved standards for automotive lubricants develop and as additional uses for additives in industrial applications are identified.

***Advanced lubricant research:** A nuclear magnetic resonance spectrometer at Lubrizol determines molecular structures of additive components to meet specific design requirements for lubricants.*

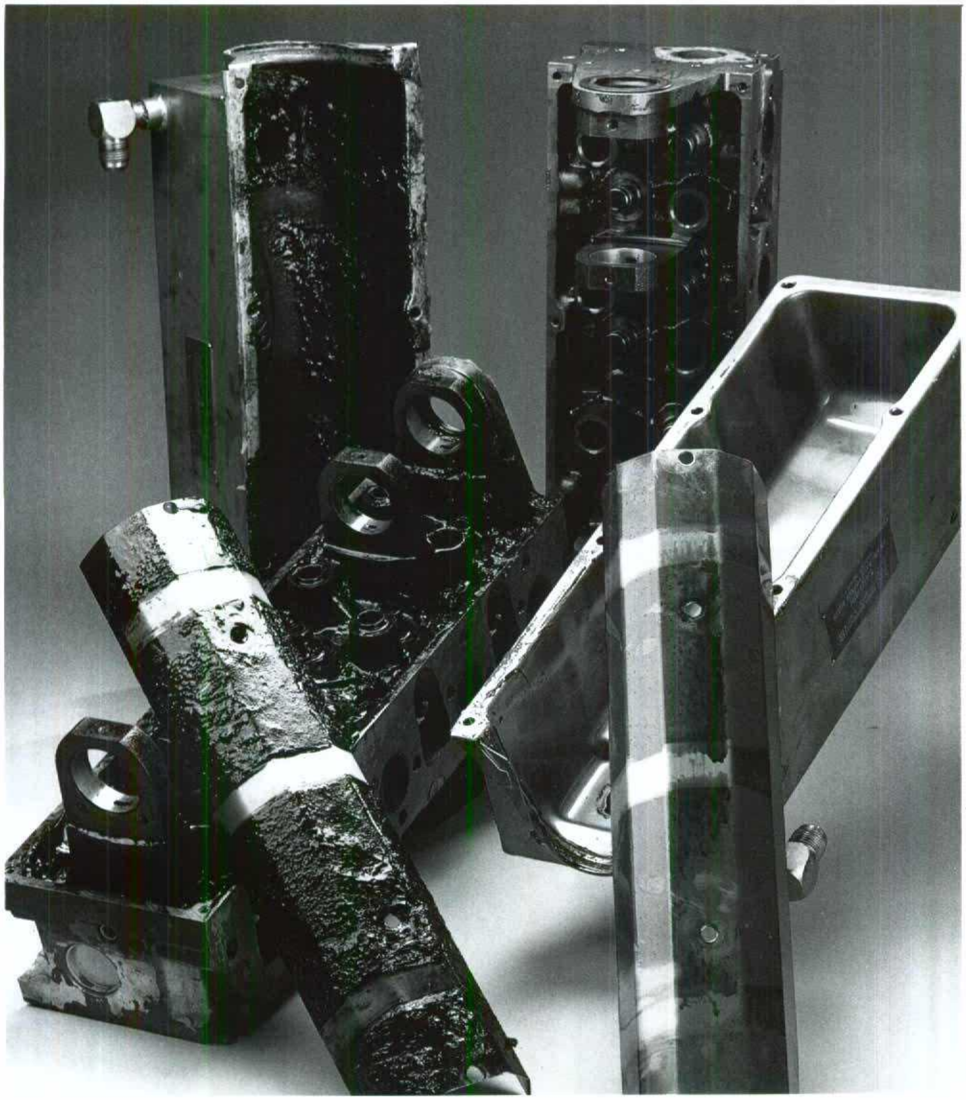
SPECIALTY CHEMICALS/ TRANSPORTATION

Lubrizol is the largest supplier of specialty chemicals for automotive lubricants in the world. Since most automotive lubricants must meet performance standards established by the technical societies, equipment manufacturers or military services, this is a true specialty chemical business.

Most of these lubricants are a combination of a petroleum base stock and a complex additive system carefully formulated to meet established specifications. Additive content may be as little as 3% or as high as 30%, depending upon the performance requirements of the lubricant and a number of other criteria including the quality and characteristics of the base oil.

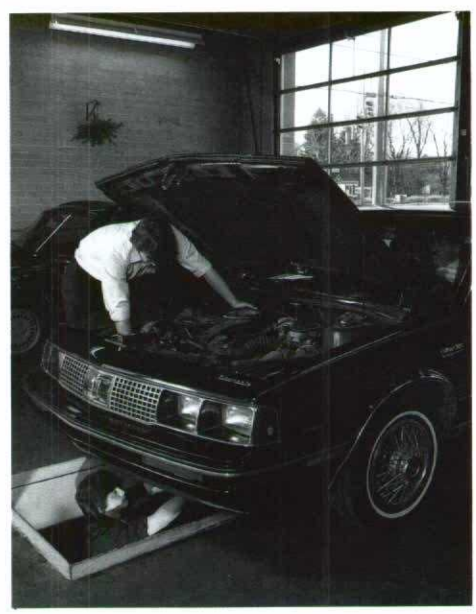
For many years, lubricant base stocks used in the United States were refined from high quality, domestic crude oil. In Europe, refiners used selected grades of Arabian crudes and produced equally high quality products. Advances in refining techniques and the invention of new refining processes have allowed the use of a wider variety of crudes.

These new methods, along with supplies from Alaska, Mexico, the Middle East, the North Sea and other areas of the world, have given refiners substantially greater flexibility and lowered their costs. In many cases, mixtures of crudes are used. These developments have inevitably led to variations in the characteristics of lubricant base stocks. Since lubricant specifications are relatively fixed, the additive system must accom-



Improved engine protection: *Heavy sludge deposits reduce engine life and impair operation. Engine components tested in severe service on present oils can produce excessive sludge as depicted on parts shown on the left. Components on the right are indicative of the potential for improved cleanliness of the proposed API SG category.*

Oil change frequency: *Convenience and growing consumer recognition that frequent oil changes are good for their cars has contributed to the rapid growth of quick service, oil change shops. These drive-through locations are expected to increase in number from approximately 2,000 today to 6,000 by 1990.*



modate these changes. Lubrizol works closely with its customers in accomplishing this. Additive technology has played an important part in allowing the refiner and lubricant marketer to continue to produce high quality lubricants that meet established specifications.

Lubrizol develops and supplies additives for motor oils, automatic transmission fluids, gear oils, farm tractor fluids, marine cylinder lubricants, two-cycle oils and other lubricants used in transportation equipment. Current developments with respect to additive usage in some of these categories of lubricants are discussed below.

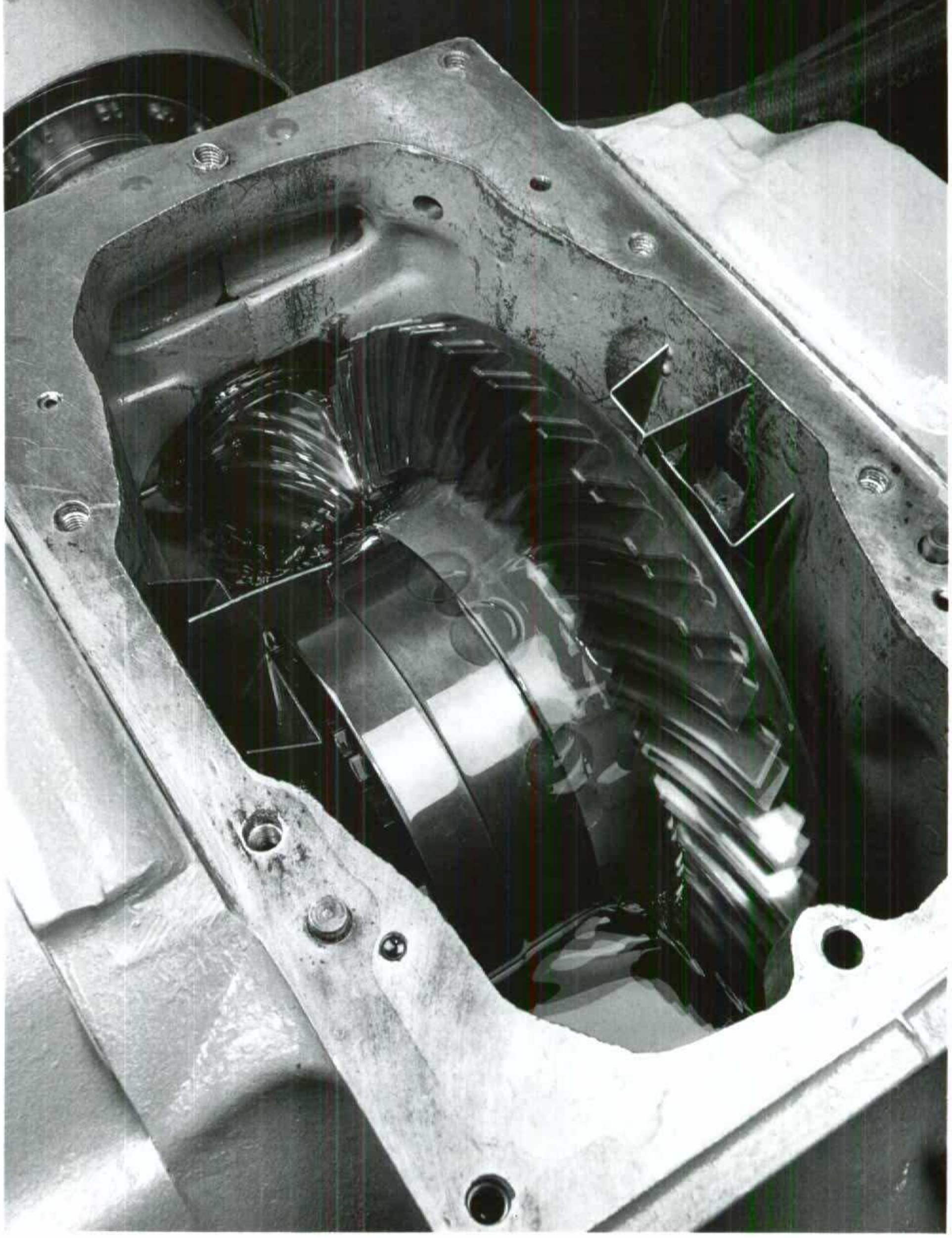
Passenger Car Motor Oils

Passenger Car Motor Oils (PCMOs) represent the largest segment of lubricant consumption. Worldwide there are more than 350 million vehicles in this category. Europe and North America account for over 80% of these vehicles. Lubrizol's 1986 shipments of additives for PCMOs were up substantially over the previous year.

The coming year promises to be an active one for PCMOs, since the American Petroleum Institute (API) expects to announce a new motor oil category. API "SG" will be a major upgrade from the previous performance levels. This new specification will address the problem of sludge formation. In addition, protection against varnish deposits and wear will be improved. Two new engines will be used to define the performance level of "SG." The Sequence V-E test will use the new Ford 2.3 liter, high swirl, fuel injected engine. The General Motors 3.8 liter V-6 engine will be used for the Sequence IIIE tests. General Motors selected Lubrizol's engine test laboratories as one of the laboratories to measure the precision of these new test procedures.

The North American market is expected to quickly accept the performance level defined by the "SG" standard. To the motorist, it will mean less sludge formed in the engine and thus less risk of clogged filters and screens that could lead to engine damage. Other benefits will include a reduction in the oil thickening that can occur in severe service and in varnish deposits in the engine. Varnish formation can cause piston ring and valve sticking and result in a loss of engine power.

Europe is also seeking an upgrade in engine oil quality. There have been field problems in European passenger cars related to the formation of "black sludge." Volkswagen has established a new specification for the lubricant used in engines of its manufacture. In addition, a new test procedure has been developed using a Daimler-Benz engine. These developments will lead to a higher level of performance than at present. The increasing use of unleaded gasoline in Europe will also require improvements in lubricants. Other areas of the world are expected to convert to higher standards following the lead of the major markets.



Heavy duty gear oils: *XRM gear oil additives are used to formulate both wide-range multigrades and high-efficiency synthetic gear oils. These lubricants are used in a variety of applications including trucks and passenger cars.*

Heavy Duty Diesel Engine Oil

Lubricating oils for heavy duty diesel engines are specifically formulated to meet the stringent performance demands of trucks, busses, construction equipment and other over-the-road and off-highway equipment.

Engine designers and manufacturers have taken advantage of improved technology to produce engines with higher power output, closer tolerances between moving parts, increased operating temperatures and improved fuel economy. Equipment owners and fleet operators are seeking extended warranties and desire longer service intervals between major engine overhauls. In the near future, regulations to limit the particulate emissions of the diesel engine will go into effect. The combination of these factors has led the engine manufacturers to request an upgrade in the quality specifications for diesel lubricating oil. By mid-1987, a new API classification is likely. The new category will be designated API "CE" and will contain higher additive levels than the former classification.

North America is the world's largest user of heavy duty diesel engines. One third of all diesel engine lubricants produced are consumed in this area. Several equipment manufacturers, such as Cummins and Caterpillar, have introduced branded products in order to provide higher quality lubricants and are supplying a portion of this market. Europe is also a large market for heavy duty diesel lubricants and is interested in higher quality. Together, these two areas are the world leaders in diesel engine technology.

Environmental Protection Agency regulations will begin to apply to diesel engines in 1988. They will limit diesel particulates and gaseous emissions and progressively reduce the amount of these materials that can be released. New engine designs to meet the demanding emission targets will bring about the next increase in the quality levels of diesel lubricants. Lubrizol is well positioned with advanced technology, effective formulations, and test capabilities to take advantage of these opportunities.

Gear Oils

Lubrizol has long been the leader in specialty chemicals for automotive gear lubricants. The introduction in 1986 of XRM™ gear lubricant products has created a new standard of quality in this field. XRM gear lubricants, which include both wide-range multigrade and high-efficiency synthetic gear oils, minimize friction and wear and permit significant savings in fuel and maintenance costs of truck fleets.

In North America, heavy duty trucks such as those used in long-distance hauling are by far the major consumers of automotive gear lubricants, representing almost 70% of the product sold. Light duty trucks and vans use 25%, and passenger cars represent the remainder.

Greater demands are being placed on the gear lubricants for heavy duty trucks. Vehicle loads are increasing and so is engine horsepower. In many states, multiple trailer operation is permitted. These changes increase the stress on the gears and bearings and, consequently, on the lubricant. XRM gear lubricants have the performance characteristics needed to meet these severe requirements.

Piston ring rating: *A precision instrument is used to determine heavy-duty diesel oil pass/fail results. One of the important criteria is the measurement of carbon deposits behind the piston rings.*

Several truck leasing companies are using XRM gear lubricants. The largest of these, with more than 100,000 vehicles, has specified the use of XRM gear lubricants for their entire fleet. Their advertising stresses the dependability of their equipment, and the use of XRM lubricants will help ensure that this is the case.

Passenger cars with rear wheel drive and/or manual transmissions and some with front wheel drive transaxles use automotive gear oils. Since most auto manufacturers recommend the factory fill lubricant for the life of the vehicle, dependability is, again, an important feature. Consequently, several of the manufacturers in the U.S. and abroad are specifying XRM lubricants. While XRM technology has only recently been introduced, it is increasingly being recognized for both truck and passenger car applications around the world.

Marine Lubricants

The marine shipping industry has experienced depressed business conditions since the end of the petroleum shock in 1980. Overbuilding of new vessels and resulting excess capacity have led to intense competition for available cargos. Cost effective operation has become the primary means of survival.

To help the marine shipping industry achieve greater operating efficiencies, diesel engine manufacturers have developed a new engine design. Designated "Super Long Stroke," the design provides increased power output, greater fuel economy, improved dependability and reduced maintenance costs. Lubrizol has developed additive systems for cylinder lubricants that help these engines achieve the goals of dependability and lower maintenance costs. A cylinder lubricant is introduced into the cylinder directly through the liner. Its function is to lubricate moving parts in the liner and piston ring area and to neutralize acids formed in the combustion process. Since the additive enhanced lubricant is consumed, large volumes are used. The additive treatment level is also high, approaching the 30% range. Year-long trials of our additive systems in working ships have been successfully completed in engines of the major manufacturers, and these additives have been introduced commercially.

Europe is the largest market for these new lubricants. As part of the marketing effort, technical literature and sales promotional information have been produced in the language of the user to facilitate his understanding of their advantages. In addition to these new products, we are offering a variety of additive components and systems for all lubricants required aboard ship.

Diesel engine testing: *One of the critical diesel engine tests used in lubricant research is in operation at Lubrizol's Wickliffe laboratory. Research is continuing on the API CE performance category which should result in higher levels of additives.*

SPECIALTY CHEMICALS / INDUSTRY

There are exciting opportunities in industrial lubricants, fuel products and diversified specialty chemicals for industrial applications. The Business Development Division was established in 1981 to strengthen and broaden Lubrizol's activities in these areas. The division now has over 120 people engaged in product development, sales and supporting activities, and sales offices or sales representatives in the major industrial areas of the world. Significant progress has been made, and the prospects for additional growth in these activities are excellent.

Industrial Products

Lubrizol is a leader in the field of specialty chemicals for industrial oils and fluids. Products introduced in 1986 include Passive Extreme Pressure™ agents, which are used in metalworking fluids, and Quick Draw™ dry film drawing compound, which is used in metal-forming operations.

Passive Extreme Pressure agents, which were developed in Lubrizol's laboratories, represent a new concept in metalworking fluids in that passive rather than active chemistry is used. This is advantageous both in terms of safeguarding the workplace and the environment. They can be used on a variety of metals, both ferrous and non-ferrous, and in oil or water-based systems. They meet or exceed the performance of conventional products.

To develop these products, a series of finished fluids were prepared and subjected to a wide variety of field testing. Since few industry specifications exist in this field, it was necessary to demonstrate performance in actual metal cutting and forming operations, using conventional fluids for comparison. In all cases, Passive Extreme Pressure agents demonstrated superior performance. They gave improved surface quality, extended tool life and allowed faster speeds and feeds.

Quick Draw dry film drawing compound, also combines the advantages of improved utility with improvements in the workplace. Using a dry film as opposed to a conventional, oil-based drawing aid is conducive to plant cleanliness as well as safety.

There is an attractive opportunity for specialty chemical technology in metalworking and a worldwide market. Passive Extreme Pressure agents and Quick Draw, both of which have been introduced commercially, represent a new and stronger presence for Lubrizol in this field.

Additives for metalworking: *Applications for Lubrizol's Passive Extreme Pressure agents include precision broaching-machine operations. These are environmentally acceptable additives for oil or water-based metalworking fluids.*

Fuel Products

Lubrizol has developed and supplied fuel additives for many years. This product line was also broadened and strengthened in 1986 by the introduction, or further commercialization, of Port Fuel Injection (PFI) gasoline additives; PowerShield® gasoline additive to protect against valve seat recession; and GEN III™ multifunctional additive for diesel fuel.

Lubrizol's PFI series of additives are used in gasoline to help prevent clogging of port fuel injection systems. These systems are increasingly being used in car engines to improve fuel economy, power and driveability. Their performance can be seriously impaired by deposits that form at the injector tips and inhibit fuel flow. When this occurs, the motorist encounters generally poor driveability, including rough idling, stalling and slow or uneven acceleration. The deposits can occur in as little as 1,000 miles of vehicle use.

Several oil companies and marketers of gasoline are using our PFI additives in their gasoline to prevent these problems. Treatment at a standard level will keep the injectors clean. However, there is increasing interest in using a higher treatment level to give the motorist the additional benefit of cleaning up deposits, if they have already occurred. There is also a growing interest in the use of PFI additives in Europe and other parts of the world.

PowerShield additive protects against valve seat recession in engines designed to use leaded gasoline. Normally, lead antiknocks in the fuel provide a lubricating quality which protects the valve seat area in the cylinder head, but the use of lead in gasoline is being phased out for environmental reasons. Without this protection, valve seat recession can occur. The risk of damage to engines designed to use leaded gasoline will increase as the lead level is reduced. PowerShield additive is being widely used in packaged products which are sold to motorists and other users of these types of engines to add to the fuel. Interest is also being shown in its adoption for use in bulk distribution systems supplying fuel for farm tractors and powerboats.

***Reduces fuel injector clogging:** Lubrizol's Port Fuel Injection additive systems, offered nationally by oil companies, clean deposits from automobile fuel injectors to improve engine performance.*


***Enhances coatings:** Introduced for commercial use in automotive coatings, Ircogel 905 imparts to high solids paints desirable flow properties while controlling viscosity and maintaining gloss.*

GEN III, a multifunctional additive, combines several features that improve diesel fuel. These include improved fuel economy, better engine performance, and reduced maintenance and downtime. It is a new concept intended to provide diesel fuel marketers with the chemical technology that will enable them to produce and promote a premium diesel fuel. The principal use of diesel fuel is in trucks and heavy equipment such as that used in construction and mining. Operating costs are an important consideration, and diesel fuel treated with GEN III offers a significant advantage in reducing both fuel and maintenance expenses.

Diversified Products

Lubrizol offers a wide range of specialty chemicals, principally for industrial use. These include corrosion control coatings for auto bodies, frames and other applications; additives for plastics; and AMPS® monomer, which is used in a variety of applications, including improved dye receptivity for acrylic fibers, oil field applications and chemicals used in water treatment. The common denominator is not the end use of these products, but rather the application of specialty chemical technology to a variety of fields. Again, there are significant opportunities to broaden our business in this manner.

Ircogel® 905 thixotropic agent, developed by Lubrizol, illustrates the nature of this work. It was introduced as a specialty chemical for moisture-cured polyurethane coatings. Additional development of the product has led to its use in high solids coatings for automobiles.

Until recently, the principal top coatings for automobiles were lacquers and enamels. Coatings of this type have a solids content of 10% to 20%, and the remainder is hydrocarbon solvent. On application, the solids remain on the work, and the solvent evaporates. Restrictions on hydrocarbon emissions required a change. Coatings with 70% solids were developed, but difficult handling and application problems limited their use. Conventional additives did not solve the problem, but Ircogel 905 has done so.

When added to high solids coatings, Ircogel 905 gives excellent flow characteristics with only a minimum increase in viscosity and no reduction in gloss. It can be used in a full range of colors and even clear coatings.

Broadening Our Base

SPECIALTY CHEMICALS/ AGRIBUSINESS

Seed sales were lower in 1986 than in 1985, principally due to the government's program to reduce crop surpluses. In addition, the vegetable seed division was sold in May. The company's first major crop of high oleic sunflowers was harvested last fall. The specialty oil obtained from this crop and chemical derivatives of the oil are being introduced for various commercial applications.

Financial Highlights

Agribusiness	In Thousands 1986	1985
Revenues	$95,962	$109,633
Research expenses	5,003	5,452
Segment income (loss)	(10,624)	4,921

High-oleic sunflower oils: *Patented sunflower seeds with a typical oleic acid content of 80% are a key to the preparation of industrial grade Sunyl chemical derivatives and food-grade Trisun vegetable oils.*

Crop Seeds

Our purpose in agribusiness is to use the latest technologies, including biotechnology, to develop superior seeds, specialty vegetable oils and other specialty chemicals from crops. Plant breeding and the production and sale of crop seeds are the responsibility of Agrigenetics Corporation, a wholly-owned subsidiary, and its six seed divisions:

DIVISION	PRINCIPAL SEEDS
GroAgri Seed Lubbock, Texas	Sorghum, cotton, sunflowers, corn
Jacques Seed Prescott, Wisconsin	Corn, soybeans, sorghum, alfalfa
McCurdy Seed Fremont, Iowa	Corn, soybeans, sorghum, alfalfa
Sigco Research Breckenridge, Minnesota	Sunflowers, corn, soybeans
Taylor-Evans Seed Tulia, Texas	Sorghum, corn
R. C. Young Seed Lubbock, Texas	Sorghum, corn

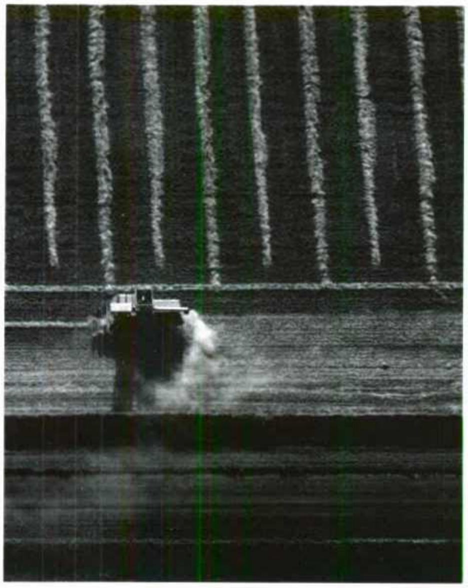
Last year, in an effort to reduce agricultural surpluses, the government provided farmers with an incentive to reduce their planting of certain major crops, and this adversely affected seed sales. Corn acreage, for example, was reduced 8%. An additional factor in Agrigenetics' lower sales was the sale of the vegetable seed division. The vegetable seed division, which had been operating at a loss in recent years, contributed $5.5 million in sales in 1986 and $13.0 million in 1985.

In addition to the lower sales, charges of $10.3 million contributed to the segment loss. The principal charges were for write-downs of seed inventories and seed conditioning plants. There was also a loss on the sale of the vegetable seed division and a one-time charge in connection with relocating Agrigenetics' headquarters from Boulder, Colorado, to the Cleveland area. A further reduction in acreage planted is anticipated in 1987, and these steps were taken to lower costs. Year-end employment totaled 711 people, a reduction of nearly 30%.

Seed corn represented 50% of 1986 sales, sorghum 14%, soybeans 12%, sunflowers 8% and seeds for other crops, including vegetables, 16%.

To increase sales abroad, Agrigenetics began a joint effort in plant research with Helizea International S.p.A., Ferrara, Italy, and acquired an interest in that company. Helizea-Agrigenetics S.p.A., the new company, will develop and sell crop seeds for the market in Italy.

SPECIALTY CHEMICALS/ NEW TECHNOLOGIES



***Crop seeds:** Through its Agrigenetics Corporation subsidiary, Lubrizol produces crop seeds for corn, sorghum, sunflowers, cotton, soybeans and alfalfa.*

Specialty Vegetable Oils and Chemicals

SVO Enterprises is the division of Agrigenetics responsible for developing the market for specialty oils and other specialty chemicals obtained from oilseed crops. Fatty acids such as erucic, lauric, linoleic, oleic, palmitic and stearic are recoverable from these oils. The oils themselves have commercial applications, and the fatty acids, which are present in different amounts depending upon the plant, are used both directly and as building blocks for more complex chemicals. The objective of our research is to modify plants to produce specific fatty acids, thereby enhancing the value of the vegetable oil and its derivatives. Since yields, resistance to weather stress, pests and disease, and other agronomic traits are important, this research and our research in developing improved crop seeds are related.

A U.S. patent has been issued to Agrigenetics covering high oleic sunflower hybrids. Planting of high oleic sunflowers was increased to 80,000 acres last spring and 40 million pounds of the oil were produced. Trisun® high oleic oil is being marketed in refined as well as crude grades for the edible and industrial markets. It has excellent oxidation stability, a property which helps reduce discoloration of food products in commercial cooking and adds to their shelf life. The oil is low in saturated fats, high in monounsaturated fat and contains no cholesterol, all of which are believed to be desirable features from a health standpoint.

The oil is also a high-purity source of oleic acid and other chemical derivatives for industrial applications. SVO Enterprises is test-marketing several of these derivatives. These include Sunyl® oleic acid and Sunyl methyl oleate, which are used in making more complex chemicals, and Sunyl glycerol trioleate and Sunyl glycerol monooleate, which are useful as surfactants in pharmaceutical, food and lubricant applications.

New, higher yielding strains of high oleic sunflowers are in development, and investigation concerning the development of specialty oils from other plants is continuing.

New Technologies made additional progress during 1986, and the segment operated near the break-even level. Research expenses were $10.1 million compared with $3.9 million a year earlier. Part of the advanced research in plant science was formerly funded by the Agrigenetics' research and development limited partnership. Before-tax gain on the sale of investments was $15.6 million.

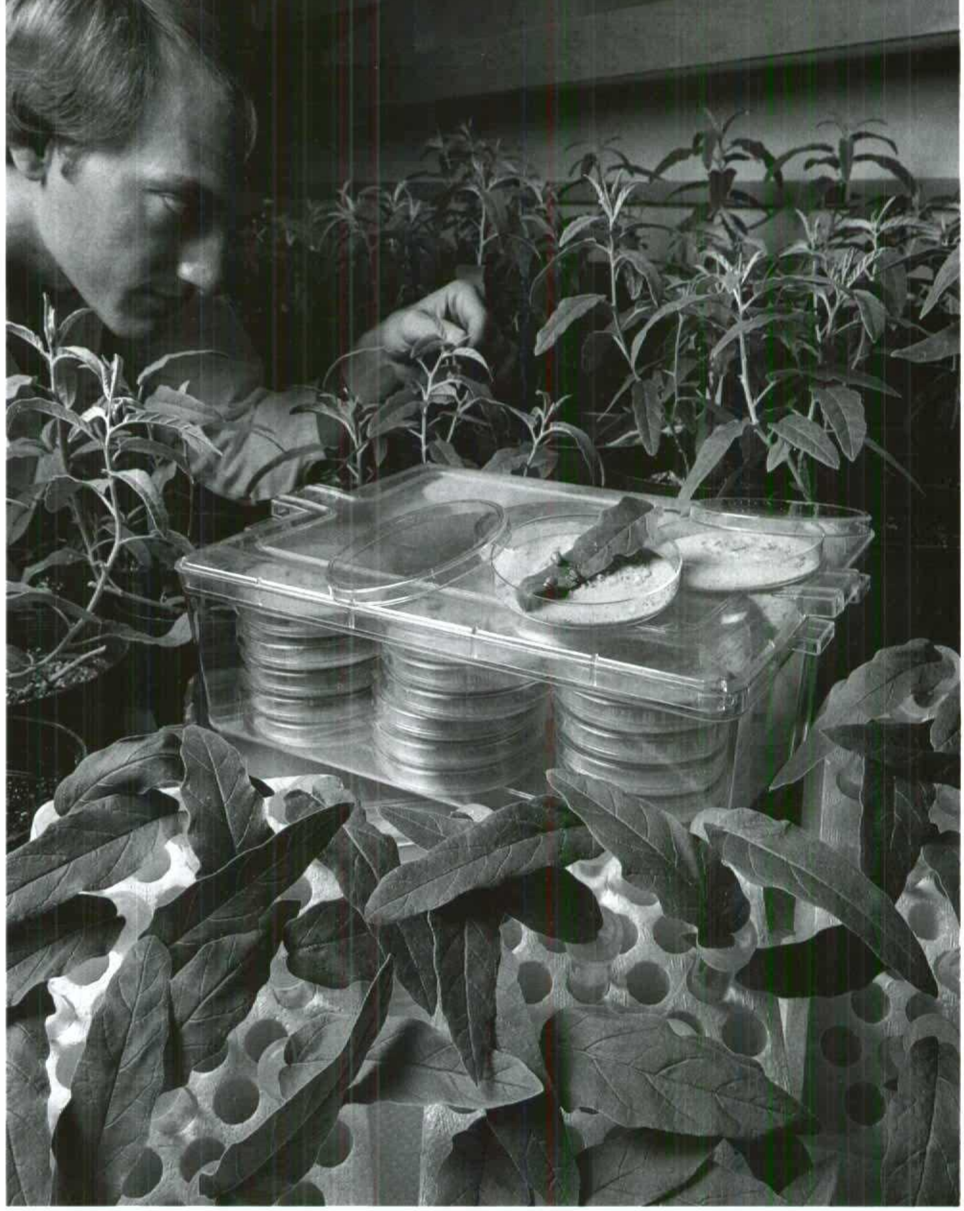
Financial Highlights

New Technologies	In Thousands 1986	1985
Gain on sale of investments	$15,637	$5,434
Research expenses	10,135	3,911
Segment loss	(462)	(5,997)

The company's activities in New Technologies are managed by Lubrizol Enterprises, Inc., a wholly-owned subsidiary. During 1986, Lubrizol

***Improved species:** Sungene scientists are using biotechnology to improve the productivity of major agricultural crop species.*

Custom-designed fine chemicals: *Production batches of custom, fine and specialty chemicals manufactured by ChemDesign Corporation are shipped to international markets. ChemDesign's capabilities include organic and biochemical manufacturing.*



Insect-resistant crops: *Through our relationship with Mycogen Corporation, research is aimed at developing genes to impart insect resistance in plants.*

Enterprises acquired its pro rata share of equity in an additional financing of Mycogen Corporation and recently agreed to fund up to $5.4 million, over three years, in research at that company to develop genes to impart insect resistance in plants. A new investment, representing a 33% interest, was made in ChemGen Corporation, which is developing biocatalytic processes for producing chemicals. Syntro Corporation, another company in which Lubrizol Enterprises has invested, had an initial public offering of its stock. Syntro is developing genetically engineered systems to produce animal vaccines and specialty chemicals.

Lubrizol's rationale for New Technologies is to develop business opportunities relating to specialty chemicals, based on the application of advanced technologies. Emphasis is on the biological, chemical and material sciences. There have been significant advances in these fields in the past decade. Some of the advances which have occurred, such as in plant science, offer a means of developing new sources of chemicals and chemical feedstocks. Crops are renewable. Environmental and waste disposal problems are minimized. Advanced biological and chemical technologies also offer a means of developing new, more efficient processes for making chemicals.

Usually, the starting point for our activities is an investment in a new company seeking to develop commercial applications of a new technology. Lubrizol Enterprises may secure rights as to particular developments and contract for research. It also contracts for research at and licenses technology from universities and other companies. Lubrizol Enterprises works closely with the new company both in overseeing, and, on occasion, collaborating on, this research and in developing the new business generally. Typically, a member of Lubrizol Enterprises' management joins the board of the new company.

Provided the research is successful, the next phase is to move the development into the marketplace. This may take a number of different forms, depending upon the financial and organizational needs of the project. Under appropriate circumstances, integrating the new activity with present operations of Lubrizol may be the best choice. Establishing a subsidiary or a joint venture, which then collaborates with other companies, is another possibility.

Another, provided the parties are agreeable, is to acquire the new company. And finally, it may be appropriate to acquire an operating company that has the capability to broadly exploit new technical developments.

Lubrizol Enterprises has a number of active projects of this type. Most, like the underlying technologies themselves, are in an early or developmental stage. As part of these activities in developing business opportunities, Lubrizol Enterprises has made a number of investments, and this has already been financially rewarding. Its principal investment in terms of recent market value is 6.9 million shares of Genentech, Inc. This includes the two-for-one split in Genentech shares in early 1987. The list of these investments, most of which are in private companies, is as follows:

Specialty chemicals from the sea: *Controlled strains of marine organisms are propagated at Ocean Genetics, Inc., where work concentrates on development of new techniques for producing specialty chemical, pharmaceutical and agrichemical products.*

Company	Field	Ownership
Biological Sciences		
Agrigenetics Advanced Science Company Madison, WI	Advanced research in plant biotechnology	100%
ChemGen Corporation Gaithersburg, MD	Development of biotransformation processes for producing specialty chemicals	33%
Creative BioMolecules, Inc. Hopkinton, MA	Protein engineering and production systems	30%
Genentech, Inc. South San Francisco, CA	Biotechnology to develop pharmaceuticals	9%
Lubrizol Genetics, Inc. Wickliffe, OH	Advanced research in plant biotechnology	100%
Mycogen Corporation San Diego, CA	Biopesticides and mycoherbicides	27%
Ocean Genetics, Inc. Santa Cruz, CA	Marine biotechnology to develop and produce specialty chemicals	20%
Sungene Technologies Corporation Palo Alto, CA	Advanced research in plant biotechnology	25%
Syntro Corporation San Diego, CA	Biotechnology to develop animal vaccines and specialty chemicals	12%
Chemical Sciences		
Catalytica Associates Mountain View, CA	Development of new catalysts for producing chemicals	17%
ChemDesign Corporation Fitchburg, MA	Production of custom, fine and specialty chemicals	38%
GLC Associates Wickliffe, OH	Joint venture 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	39%
Greenwich Oil Corporation Dallas, TX	Thermally enhanced oil recovery	16%
Intera Company, Ltd. Cleveland, TN	Technology and specialty chemicals to improve synthetic fibers	32%

MANAGEMENTS' 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 develops, produces and sells chemical additives for automotive and industrial lubricants and functional fluids, fuel additives and diversified specialty chemical products. The Agribusiness segment 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., the company's venture development subsidiary, invests in developing companies and is engaged in research activities utilizing advanced technologies.

RESULTS OF OPERATIONS

Consolidated revenues increased $72 million or 8% in 1986 due to an $86 million or 11% increase in revenues of Transportation & Industry, the company's largest segment. This was partially offset by a $14 million decline in Agribusiness revenues. Gross profit (Sales less Cost of Sales) as a percentage of sales improved 2% to 29% because of reduced material costs and lower manufacturing expenses per unit in Transportation & Industry.

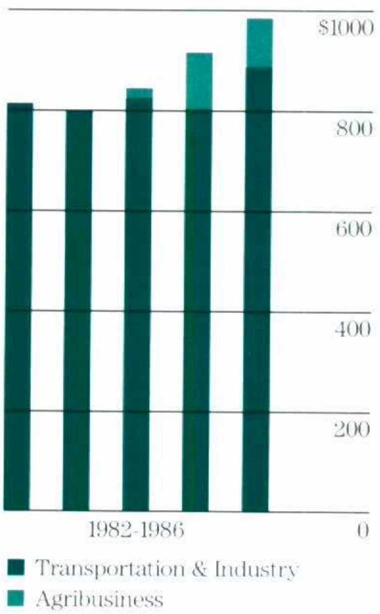
Selling and administrative expenses increased 13% in 1986 because of currency effects, higher testing costs in Transportation & Industry due to anticipated new additive specifications and increased administrative support. Research and development expenses increased 18% primarily due to advanced research in plant science, which had been partially funded by a limited partnership through 1985 but was funded solely by the company in 1986.

Income from operations increased 14% in 1986 as a result of the strong performance of Transportation & Industry. As a percentage of revenues, income from operations was 11% in 1986, 10% in 1985 and 12% in 1984.

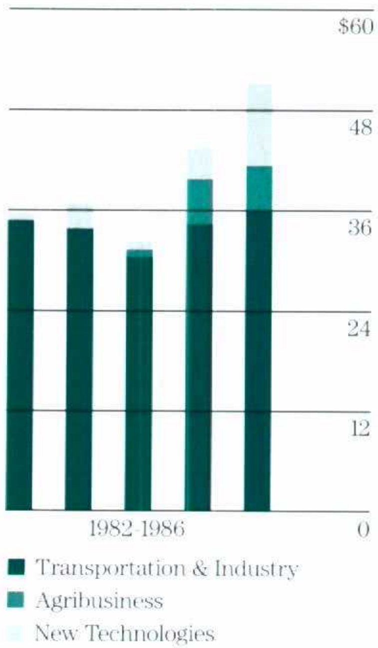
Net income increased 30% in 1986 to $78 million or $1.97 per share, compared to $1.49 per share in 1985. In addition to the improvement in Transportation & Industry segment income which offset the Agribusiness loss, gain on sale of investments contributed $11 million ($.28 per share) to net income in 1986 compared to $4 million ($.10 per share) in 1985.

Return on average shareholders' equity was 14% in 1986, 12% in 1985 and 14% in 1984.

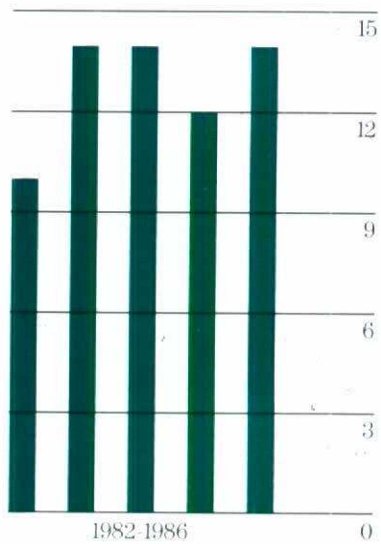
Revenues by Segment
(millions)



Research & Development Expenses
(millions)



Return on Equity
(percent)



OPERATING RESULTS BY BUSINESS SEGMENT

(In Thousands of Dollars)	**1986**	1985	1984
Revenues:			
Transportation & Industry	**$889,220**	$803,718	$831,335
Agribusiness	**95,962**	109,633	12,840
Total	**$985,182**	$913,351	$844,175
Gross profit:			
Transportation & Industry	**$257,248**	$205,441	$201,316
Agribusiness	**24,460**	38,832	2,987
Total	**$281,708**	$244,273	$204,303
Research and development expenses[a]:			
Transportation & Industry	**$ 36,085**	$ 34,128	$ 30,431
Agribusiness	**5,003**	5,452	932
New Technologies	**10,135**	3,911	1,201
Total	**$ 51,223**	$ 43,491	$ 32,564
Business segment income (loss)[b]:			
Transportation & Industry	**$139,632**	$102,931	$110,167
Agribusiness	**(10,624)**	4,921	752
New Technologies	**(462)**	(5,997)	(4,991)
Total	**$128,546**	$101,855	$105,928

(a) In 1986, advanced research in plant science was transferred from Agribusiness to New Technologies. Comparative amounts for 1985 have been reclassified.

(b) Business segment income (loss) is before interest and income taxes.

In 1985, consolidated revenues increased $69 million or 8% compared to 1984. Additional revenues of $97 million generated through the acquisition of Agrigenetics offset a 3% decline in Transportation & Industry revenues. Selling, administrative and research expenses increased $44 million or 38%. Of this increase, $34 million was due to the acquisition of Agrigenetics and the remainder resulted from increased administrative costs and research activities in the Transportation & Industry and New Technologies areas. Operating income declined $6 million or 6% compared to 1984 principally because of a decline in Transportation & Industry. Interest income declined in 1985 as funds were used for working capital needs of Agrigenetics and a stock repurchase program.

As a result of the above factors, 1985 net income decreased $7.5 million or 11% compared to 1984. Because of the decline in net income and the issuance of shares in connection with the acquisition of Agrigenetics, net income per share declined 24 cents in 1985 to $1.49. The acquisition of Agrigenetics had a dilutive effect of 14 cents per share in 1985.

In recent years, inflation in the countries in which the company has significant operations has been low. While costs and expenses generally parallel inflation, many of the company's raw materials in the Transportation & Industry segment are related to petrochemicals where costs have decreased in the last two years. As a result, some Transportation & Industry selling prices were reduced in 1986. Agribusiness is not affected as significantly by inflation as by other factors such as annual crop yields, commodity prices and government farm programs.

Transportation & Industry Segment

In 1986, Transportation & Industry revenues, which accounted for 90% of consolidated revenues, increased because of an 8% improvement in volume and the effect of the weaker dollar. 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 of the segment increased 16% because of currency effects, higher testing costs and increased administrative support.

Segment income of Transportation & Industry increased 36% in 1986 due to improved volume and the effect of the weaker dollar, partially offset by the increase in selling and administrative expenses and a 6% increase in research expenses. A change in the method of accounting for pensions under the new accounting standard increased segment income by $4.7 million.

In 1985, Transportation & Industry revenues declined 3% compared to 1984 primarily due to lower volume in overseas markets. The gross profit percentage increased 1% to 26% because lower material costs, manufacturing efficiencies and positive foreign currency effects offset lower volume.

Selling and administrative expenses of this segment increased 8% in 1985 because of higher personnel costs, patent litigation expenses and market development activities. Research expenses were higher because of increased levels of activity in chemicals for industrial applications. Segment income decreased $7.2 million or 7% as a result of the above factors.

Agribusiness Segment

The Agribusiness segment is comprised of Agrigenetics Corporation, acquired in 1985, SVO Enterprises, formed in 1984 to develop and market vegetable oils, and two seed businesses previously acquired.

Agribusiness revenues decreased 12% in 1986 because of the sale of the Sunseeds division early in the year and lower volume from remaining operations, caused principally by reduced acreage planted by farmers under the U.S. government farm program. In anticipation of additional reductions in acreage in 1987, the company wrote-off $4.5 million of seed inventories which were considered excess and closed five seed processing plants with a resultant write-down of $3 million. These actions, along with lower volume, caused a decrease in 1986 gross profit of 37%. The gross profit percentage declined to 25% in 1986 from 35% in 1985, with the excess inventory and plant write-offs accounting for eight percentage points of the decline.

Agribusiness reported a $10.6 million segment loss in 1986 because of the lower gross profit and a $1.1 million loss on the sale of the Sunseeds division.

In 1985, the increase in revenues, gross profit and segment income compared to 1984 was due to the acquisition of Agrigenetics. Revenues in 1985 were slightly less than 1984 on a comparable basis if Agrigenetics had been acquired at that time. Business segment income, after the transfer of advanced research activities to New Technologies, was $4.9 million in 1985. In 1984, Agribusiness operations consisted only of the two seed companies previously acquired.

New Technologies Segment

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

New Technologies incurred a small 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. At December 31, 1986 the market value of marketable securities owned by this segment exceeded cost by $285 million. 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.

The segment loss increased in 1985 compared to 1984 because of higher research expenses and equity losses of non-consolidated companies, partially offset by the gain on sale of investments. The segment loss in 1984 resulted from equity losses and ongoing administrative and research expenses without the benefit of any investment sale gains.

WORKING CAPITAL, LIQUIDITY AND CAPITAL RESOURCES

Cash provided from operations during 1986 was $146 million, an increase of $45 million over 1985. The increase resulted from higher segment income of Transportation & Industry, gain on sale of investments and positive cash flow from the Agribusiness segment.

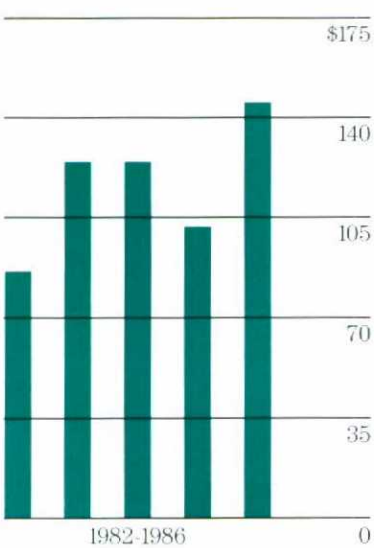
The company's financial position continues to be strong. At the end of 1986, the ratio of current assets to current liabilities increased to 2.8 to 1 from 2.5 to 1 at the end of 1985. Long-term debt as a percent of total capitalization (shareholders' equity plus long-term debt) decreased to 8% from 12% at the end of 1985.

During 1986, the company borrowed $32 million in long-term funds and used the proceeds, along with internally generated cash, to reduce outstanding commercial paper. This enabled the company to reduce its supporting credit facilities to $46 million from $96 million at the end of 1985. The company believes its credit facilities and internally generated funds will be sufficient to meet normal working capital and capital investment needs during 1987. The company also believes it has the financial strength to obtain additional credit facilities and other financing as needed.

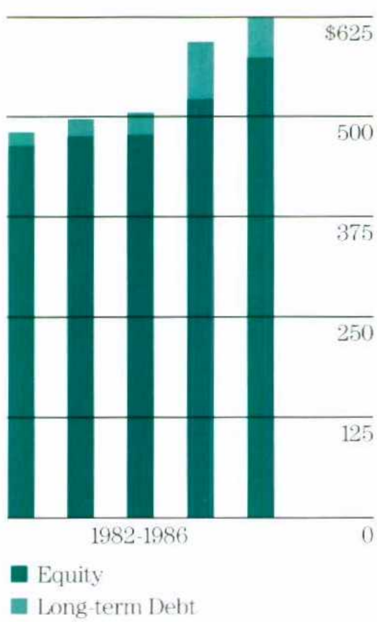
Capital investments consist of both property additions and equity investments. Property additions, primarily to provide manufacturing, administrative and technical support to Transportation & Industry, are anticipated to be approximately $50 million in 1987.

The company expects that the Tax Reform Act of 1986 will not have a material impact on net income. The portion of the company's pre-tax income that is generated outside the United States is not currently subject to U.S. income taxes. On income subject to U.S. tax, it is anticipated that the benefit of the scheduled reductions in the statutory rate to 40% in 1987, and 34% thereafter, will be 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 company also expects that the Act will not have a material impact on either the amount of worldwide income taxes currently payable or the company's liquidity.

Cash Provided from Operations
(millions)



Capitalization
(millions)



CONSOLIDATED STATEMENTS OF INCOME

	Year Ended December 31		
(In Thousands of Dollars Except Per Share Data)	**1986**	1985	1984
Revenues:			
Net sales	**$976,776**	$903,403	$831,681
Royalties and other revenues	**8,406**	9,948	12,494
Total	**985,182**	913,351	844,175
Cost and expenses:			
Cost of sales	**695,068**	659,130	627,378
Selling and administrative expenses	**129,427**	114,867	81,937
Research and development expenses	**51,223**	43,491	32,564
Total	**875,718**	817,488	741,879
Income from operations	**109,464**	95,863	102,296
Other income	**19,082**	5,992	3,632
Interest — net	**118**	1,590	9,156
Income before taxes on income	**128,664**	103,445	115,084
Provision for taxes on income	**50,479**	43,221	47,353
Net income	**$ 78,185**	$ 60,224	$ 67,731
Net income per share	**$ 1.97**	$ 1.49	$ 1.73

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

CONSOLIDATED BALANCE SHEETS

(In Thousands of Dollars)	December 31 1986	1985
Assets		
Current assets:		
Cash and short-term investments	**$ 85,643**	$ 63,027
Receivables	**165,386**	153,445
Inventories	**194,170**	214,844
Other	**17,783**	16,125
Total current assets	**462,982**	447,441
Property and equipment—at cost	**642,189**	600,585
Less accumulated depreciation	**353,111**	310,287
	289,078	290,298
Investments in non-consolidated companies	**77,963**	69,708
Intangible and other assets	**47,884**	46,998
TOTAL	**$877,907**	$854,445
Liabilities and Shareholders' Equity		
Current liabilities:		
Short-term debt	**$ 4,303**	$ 31,448
Accounts payable	**85,713**	90,988
Income taxes and other current liabilities	**72,781**	60,107
Total current liabilities	**162,797**	182,543
Other liabilities:		
Long-term debt	**52,616**	73,444
Non-current liabilities	**16,806**	13,161
Deferred income taxes	**73,009**	65,999
Total liabilities	**305,228**	335,147
Shareholders' equity:		
Common shares	**76,476**	75,108
Retained earnings	**529,428**	498,605
Accumulated translation adjustment	**(33,225)**	(54,415)
Total shareholders' equity	**572,679**	519,298
TOTAL	**$877,907**	$854,445

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

CONSOLIDATED STATEMENTS OF CHANGES IN FINANCIAL POSITION

(In Thousands of Dollars)	Year Ended December 31 **1986**	1985	1984
Cash Provided from (Used for):			
Operations:			
Net income	**$ 78,185**	$ 60,224	$ 67,731
Charges to operations not requiring cash:			
Depreciation and amortization	**47,807**	49,253	38,723
Deferred taxes	**5,523**	11,861	6,456
Write-down of assets	**8,400**	3,100	13,615
Other, including equity earnings of non-consolidated companies	**3,684**	7,113	(3,336)
	143,599	131,551	123,189
Change in non-cash working capital:			
Receivables	**(16,889)**	(10,698)	8,388
Inventories	**9,579**	(31,449)	7,196
Payables and other current liabilities	**(4,948)**	(3,485)	879
Other current assets	**(1,282)**	(1,210)	(167)
Effect of changes in currency translation rates	**16,210**	16,739	(15,170)
	2,670	(30,103)	1,126
Cash provided from operations	**146,269**	101,448	124,315
Dividends	**(46,423)**	(46,993)	(43,849)
Capital Investments:			
Capital expenditures	**(40,460)**	(39,498)	(29,490)
Acquisition of net assets of Agrigenetics, excluding cash		(45,059)	
Investments in non-consolidated companies, and other acquisitions	**(11,695)**	(19,433)	(19,511)
Sale of division, less non-cash proceeds of $5,758	**7,879**		
	(44,276)	(103,990)	(49,001)
Financing:			
Borrowing (repayment) other than acquired Agrigenetics debt:			
Short-term	**(27,145)**	(30,433)	
Long-term	**(20,901)**	15,353	1,443
Issuance of Common shares to acquire Agrigenetics		45,360	
Common shares issued (purchased)	**429**	(35,921)	(1,700)
Other-net	**14,663**	6,909	(9,492)
Increase (Decrease) in Cash and Short-Term Investments	**$ 22,616**	$ (48,267)	$ 21,716

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, 1983	39,194,957	$30,712	$498,149	$(57,340)
Net income for 1984			67,731	
Cash dividends ($1.12 per share)			(43,849)	
Translation adjustment for 1984				(19,360)
Common shares—Treasury:				
Shares purchased	(89,784)	(70)	(1,743)	
Shares issued upon exercise of stock options	5,500	113		
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)

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 wholly-owned 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 73% 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.

INVESTMENT TAX CREDITS — Investment tax credits are accounted for using the flow-through method under which credits earned during the year are used to reduce the income tax provision. The U.S. investment tax credit was repealed by the Tax Reform Act of 1986, generally for property placed into service after 1985. Credits recorded in 1986 are allowed under transition rules.

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 shares 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 1% in any year.

Note 2 — Inventories

	1986	1985
Finished products	$ 71,286	$ 83,137
Products in process	77,705	77,296
Raw materials and supplies	45,179	54,411
	$194,170	$214,844

Inventories on the LIFO method at December 31, 1986 and 1985 were 23% and 26% of consolidated inventories. The current replacement cost of these inventories exceeded the LIFO cost at December 31, 1986 and 1985 by $28.6 million and $38.9 million. At December 31, 1986 and 1985, inventories of the Transportation & Industry segment were $134.4 million and $138 million, and Agribusiness inventories were $59.8 million and $76.8 million.

Note 3 — Investments in Non-consolidated Companies

	1986	1985
Investments carried at equity	$58,863	$49,952
Investments carried at cost	19,100	19,756
	$77,963	$69,708

Investments carried at equity exceeded the company's equity in the underlying book values by $26 million and $24 million at December 31, 1986 and 1985. The excess is being amortized over periods not exceeding 20 years.

Investments carried at cost include marketable equity securities of $16.6 million in 1986 and $12.8 million in 1985. The market value of these securities exceeded the cost by $285 million and $123 million at December 31, 1986 and 1985.

Note 4 — Short-Term and Long-Term Debt

Short-term debt of $4.3 million at December 31, 1986 consisted of short-term loan arrangements with banks, and at December 31, 1985 consisted of commercial paper borrowings of $22 million and bank borrowings of $9.4 million.

Long-term debt consists of:

	1986	1985
7.875% Marine terminal/Industrial development revenue bonds, due 2000	$19,375	$19,375
Term Loans		
7.99% due 1992	20,000	
6.5% yen denominated, due 1993	12,025	
Other (various rates)	1,216	4,069
Commercial paper		50,000
Total	$52,616	$73,444

At December 31, 1986, the company had a revolving credit agreement and other credit lines aggregating $46 million. These facilities, unused in 1986, would permit the company to borrow at or below the U.S. prime rate. Commercial paper was classified as non-current in 1985, as it was supported by credit facilities which would have permitted the company to refinance for a period beyond one year.

Interest expense was $7.9 million in 1986, $9.5 million in 1985 and $5.1 million in 1984.

Note 5 — Other Balance Sheet Information

Receivables:	1986	1985
Customers	$137,841	$133,491
Affiliates	15,398	11,717
Other	12,147	8,237
	$165,386	$153,445

Receivables are net of allowance for doubtful accounts of $3.3 million in 1986 and $2.9 million in 1985.

Property and Equipment:	1986	1985
Land and improvements	$ 58,971	$ 56,401
Buildings and improvements	115,558	109,038
Machinery and equipment	457,532	424,172
Construction in progress	10,128	10,974
	$642,189	$600,585

Depreciation expense was $42.6 million in 1986, $44.6 million in 1985 and $38.7 million in 1984.

Accounts Payable:	1986	1985
Trade	$76,919	$85,429
Affiliates	8,794	5,559
	$85,713	$90,988

Income Taxes and Other Current Liabilities:	1986	1985
Income taxes	$21,241	$31,256
Employee compensation	18,562	13,273
Dividends payable	12,005	
Taxes other than income	7,531	7,105
Other	13,442	8,473
	$72,781	$60,107

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 is 60,000,000 shares without par value. Outstanding Common Shares were 39,690,808 and 39,660,740 at December 31, 1986 and 1985, after deducting treasury shares of 3,407,139 and 3,437,207.

Note 7 — Other Income

	1986	1985	1984
Gain on sale of investments	$15,637	$ 5,434	
Equity earnings of non-consolidated companies	480	313	$ 3,163
Write-down and sale of distribution facilities		(3,100)	(13,615)
Patent settlements			14,500
Other-net	2,965	3,345	(416)
	$19,082	$ 5,992	$ 3,632

Note 8 — Income Taxes

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

	1986		1985		1984	
	United States	Foreign	United States	Foreign	United States	Foreign
Income before taxes on income	$54,594	$74,070	$44,680	$58,765	$65,538	$49,546
Provision for taxes on income:						
Current	$ 8,092	$38,843	$ 821	$28,618	$14,428	$28,640
Deferred	5,261	(1,717)	11,000	2,782	5,020	(735)
	$13,353	$37,126	$11,821	$31,400	$19,448	$27,905

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 and the tax shown in the consolidated statements of income are summarized as follows:

	1986	1985	1984
Tax at statutory rate of 46%	$59,185	$47,585	$52,939
Tax rate differential on capital gains/dividends	(3,639)	(1,194)	(935)
DISC/FSC earnings	(1,979)	(1,097)	(1,441)
Earnings of non-consolidated companies	(1,180)	(180)	(1,561)
Investment tax credit	(1,102)	(2,515)	(1,280)
Other	(806)	622	(369)
Tax shown in the statement of income	$50,479	$43,221	$47,353

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:

	1986	1985	1984
Accelerated depreciation	$ 2,735	$ 7,239	$4,975
Partnership expense allocations	3,540	2,182	547
Intercompany profit in inventory	(2,790)	1,214	209
Prepaid expenses	(461)	3,680	
Other	520	(533)	(1,446)
	$ 3,544	$13,782	$4,285

Undistributed earnings of subsidiaries and affiliates were approximately $161 million, $155 million and $168 million at December 31, 1986, 1985 and 1984, 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, 1986, 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.

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.

Expense of all retirement plans was $4.2 million in 1986, $8.3 million in 1985 and $8.8 million in 1984, including profit sharing contributions of $2.9 million, $2.2 million and $2.5 million. 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 change reduced 1986 pension cost by $4.7 million.

Cost of U.S. pension plans in 1986 consisted of:

Service cost — benefits earned during the period	$ 2,726
Interest cost on projected benefit obligation	3,498
Actual return on plan assets	(10,463)
Net amortization and deferral	3,436
Net periodic pension cost (income)	$ (803)

The funded status of U.S. pension plans is as follows:

	December 31	
	1986	1985
Fair value of plan assets	$72,551	$66,284
Projected benefit obligation	47,572	41,004
Excess of plan assets over projected benefit obligation	24,979	25,280
Unrecognized net gain:		
At initial adoption of SFAS No. 87	(23,052)	(25,631)
Subsequent to adoption	(1,011)	
Prepaid (accrued) pension cost	$ 916	$ (351)
Actuarial present value of accumulated benefit obligation, including vested benefits of $28,685 in 1986 and $24,293 in 1985	$30,672	$25,833

For the U.S. plans, the projected benefit obligation was determined using an assumed discount rate of 7.5% at December 31, 1986 and 8% at December 31, 1985, and a long-term rate of compensation increase of 5.5%. Annual rate of return on plan assets is assumed to be 8%. Plan assets are invested in listed equity securities and fixed income instruments including insurance contracts.

SFAS No. 87 has not been adopted for pension plans outside the U.S. However, the assets of those plans exceeded the actuarially computed value of vested benefits at December 31, 1986 and 1985.

Health care benefits for retired employees are expensed as paid. The cost was $1.2 million in 1986 and less than $1 million in 1985 and 1984.

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	Other Areas	Eliminations	Consolidated Total
1986					
Revenues	$481,011	$310,018	$194,153		$985,182
Intercompany transfers	122,303	4,400	958	$(127,661)	
Total	$603,314	$314,418	$195,111	$(127,661)	$985,182
Operating profit	$ 60,606	$ 48,548	$ 17,636	$ (3,331)	$123,459
General corporate expenses					13,995
Income from operations					$109,464
Identifiable assets	$486,448	$161,906	$117,283	$ (42,654)	$722,983
Corporate assets					154,924
Total assets					$877,907
1985					
Revenues	$482,324	$252,324	$178,703		$913,351
Intercompany transfers	113,383	7,647	1,227	$(122,257)	
Total	$595,707	$259,971	$179,930	$(122,257)	$913,351
Operating profit	$ 51,509	$ 37,585	$ 17,835	$ 2,874	$109,803
General corporate expenses					13,940
Income from operations					$ 95,863
Identifiable assets	$507,528	$139,956	$112,043	$ (46,029)	$713,498
Corporate assets					140,947
Total assets					$854,445
1984					
Revenues	$411,604	$244,952	$187,619		$844,175
Intercompany transfers	119,145	6,355	1,190	$(126,690)	
Total	$530,749	$251,307	$188,809	$(126,690)	$844,175
Operating profit	$ 61,380	$ 35,003	$ 16,390	$ 562	$113,335
General corporate expenses					11,039
Income from operations					$102,296
Identifiable assets	$369,677	$109,935	$111,601	$ (55,431)	$535,782
Corporate assets					166,192
Total assets					$701,974

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 $93 million in 1986, $84 million in 1985 and $95 million in 1984. The consolidated statements of income include after-tax foreign currency gains of $.8 million in 1986, and losses of $.2 million and $1.9 million in 1985 and 1984.

Net assets of non-U.S. subsidiaries at December 31, 1986 and 1985 were $236 million and $224 million, respectively. Net income of these subsidiaries was $37 million in 1986, $31 million in 1985 and $33 million in 1984; and dividends received from the subsidiaries were $52 million, $39 million and $18 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 14 and 15. Following is additional industry segment information:

	Identifiable Assets	Capital Expenditures	Depreciation & Amortization
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

In 1984, more than 90% of the company's revenues, operating profits and identifiable assets were attributable to the Transportation & Industry segment.

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 40% of consolidated sales in 1986, 39% in 1985, and 44% in 1984.

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		
	1986	1985	1984
Outstanding, January 1	553,471	516,050	446,280
Granted at $21.94 to $39.74 per share	136,062	44,250	85,350
Assumed in Agrigenetics acquisition at $23.38 to $39.74 per share		109,933	
Exercised at $18.63 to $24.50 per share	(60,603)	(75,862)	(5,500)
Expired at $20.50 per share		(19,900)	
Surrendered at $18.63 to $24.50 per share	(250)	(21,000)	(10,080)
Outstanding, December 31	628,680	553,471	516,050
Exercisable, December 31	327,252	334,006	299,194
Available for grant, December 31	1,319,688	1,455,750	836,556

At December 31, 1986, there were stock appreciation rights outstanding relating to options for 48,000 shares, all of which were granted under the 1975 Plan.

The 1975 Plan options expire through November 1994, with an average option price of $22.91. 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 $30.60. The 1985 Plan options expire June 1995 to November 1996, with an average option price of $29.70.

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 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 has been allocated to the assets and liabilities acquired based upon their estimated fair value at the date of acquisition, as follows:

Current assets, excluding cash of $2,012	$ 77,567
Property and equipment	45,159
Intangible and other assets	34,116
Notes payable	(52,500)
Other current liabilities	(31,709)
Long-term debt	(27,574)
Net	$ 45,059

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.

Agrigenetics' results of operations have been included in the company's financial statements from January 1, 1985. If Agrigenetics' operations for its fiscal year ended August 31, 1984 were combined with those of Lubrizol for the year ended December 31, 1984, consolidated revenues, net income, and net income per share for 1984 would have been $949.2 million, $61.9 million, and $1.50, respectively.

In acquiring Agrigenetics, the company obtained the right to exercise an option to purchase the program assets of Agrigenetics Research Associates Limited, a limited partnership, for $5.5 million in cash and future royalties as products are commercialized. The company exercised this option in 1985.

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, 1986 and 1985 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, 1986. 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, 1986 and 1985 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, 1986 in conformity with generally accepted accounting principles applied on a consistent basis.

Cleveland, Ohio
February 23, 1987

Deloitte Haskins + Sells

QUARTERLY FINANCIAL DATA (Unaudited)

	Three Months Ended			
	March 31	June 30	Sept. 30	Dec. 31
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
1985				
Net sales:				
Transportation & Industry	$195,676	$203,870	$198,815	$195,409
Agribusiness	57,349	43,536	2,608	6,140
Total	$253,025	$247,406	$201,423	$201,549
Gross profit (loss):				
Transportation & Industry	$ 51,053	$ 54,442	$ 50,857	$ 49,089
Agribusiness	22,779	17,577	(698)	(826)
Total	$ 73,832	$ 72,019	$ 50,159	$ 48,263
Net income	$ 19,438	$ 15,844	$ 13,632	$ 11,310
Net income per share	$.47	$.39	$.34	$.29

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
1986				
Gain on sale of investments	$ .27			$ .01
Agribusiness asset write-downs and loss on sale of division		$(.02)	$(.07)	(.05)
Early retirement programs	(.03)			(.06)
1985				
Gain on sale of investments	.01		.05	.04
Write-down of ships		(.05)		

TEN YEAR SUMMARY

(In Thousands of Dollars Except Per Share Data)	1986	1985	1984
Summary of Operations			
Revenues	**$985,182**	$913,351	$844,175
Cost and expenses:			
Cost of sales	**695,068**	659,130	627,378
Selling, administrative & research expenses	**180,650**	158,358	114,501
Total	**875,718**	817,488	741,879
Income from operations	**109,464**	95,863	102,296
Other income (charges)	**19,200**	7,582	12,788
Income before taxes on income	**128,664**	103,445	115,084
Provision for taxes on income	**50,479**	43,221	47,353
Net income	**$ 78,185**	$ 60,224	$ 67,731
For the Year:			
Net income per share	**$ 1.97**	$ 1.49	$ 1.73
Dividends declared per share	**1.17**	1.16	1.12
Average Common Shares outstanding (in thousands)	**39,678**	40,409	39,138
Consolidated Statement of Financial Position			
Current assets	**$462,982**	$447,441	$376,050
Current liabilities	**162,797**	182,543	132,252
Working capital	**300,185**	264,898	243,798
Property and equipment — net	**289,078**	290,298	251,735
Other assets	**125,847**	116,706	74,189
Total	**715,110**	671,902	569,722
Less:			
Long-term debt	**52,616**	73,444	30,416
Non-current liabilities	**16,806**	13,161	11,480
Deferred income taxes	**73,009**	65,999	53,483
Net assets — Shareholders' equity	**$572,679**	$519,298	$474,343
Other Data			
Return on average shareholders' equity	**14%**	12%	14%
Total assets	**$877,907**	$854,445	$701,974
Capital investments	**52,155**	103,990	49,001
Depreciation	**42,591**	44,605	38,723
At End of Year:			
Number of employees	**4,802**	5,205	4,176
Number of shareholders	**9,240**	10,803	10,804
Common Shares outstanding (in thousands)	**39,691**	39,661	39,111
Shareholders' equity per share	**$ 14.43**	$ 13.09	$ 12.13

1983	1982	1981	1980	1979	1978	1977
$800,303	$812,247	$899,161	$922,697	$741,518	$595,257	$514,711
588,266	610,717	653,748	644,080	511,038	404,473	354,609
113,363	107,470	96,006	86,980	73,135	66,579	56,745
701,629	718,187	749,754	731,060	584,173	471,052	411,354
98,674	94,060	149,407	191,637	157,345	124,205	103,357
15,032	(6,739)	8,168	3,575	2,489	12,243	1,248
113,706	87,321	157,575	195,212	159,834	136,448	104,605
48,962	39,760	65,544	83,701	69,059	59,083	46,536
$ 64,744	$ 47,561	$ 92,031	$111,511	$ 90,775	$ 77,365	$ 58,069
$ 1.65	$ 1.21	$ 2.36	$ 2.87	$ 2.33	$ 1.97	$ 1.48
1.08	1.08	1.08	.90	.80	.70⅓	.62½
39,195	39,192	38,986	38,850	38,952	39,176	39,198
$361,964	$304,542	$341,825	$346,001	$303,008	$278,226	$229,668
129,766	115,255	129,696	136,835	116,304	95,939	70,597
232,198	189,287	212,129	209,166	186,704	182,287	159,071
274,337	288,504	284,088	248,664	180,405	150,019	121,369
46,563	50,698	47,252	56,472	36,529	13,490	9,430
553,098	528,489	543,469	514,302	403,638	345,796	289,870
27,213	19,428	25,268	22,846			
10,038	8,961	8,829	13,653	10,041	8,346	5,185
44,326	38,056	30,854	25,016	18,846	14,414	12,902
$471,521	$462,044	$478,518	$452,787	$374,751	$323,036	$271,783
14%	10%	20%	27%	26%	26%	22%
$682,864	$643,744	$673,165	$651,137	$519,942	$441,735	$360,467
27,961	64,044	77,214	99,403	74,611	47,610	26,642
37,038	37,168	32,068	23,414	18,406	15,256	14,270
4,165	4,322	4,237	4,155	3,905	3,803	3,627
11,277	10,615	9,986	9,004	8,305	8,502	8,846
39,195	39,195	39,946	39,863	39,750	40,002	39,772
$ 12.03	$ 11.79	$ 11.98	$ 11.36	$ 9.43	$ 8.08	$ 6.83

OFFICERS AND DIRECTORS

Directors

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

W. G. BARES
President

ANDRE GILLET
Chairman and Chief Executive Officer, International Multifoods Corporation, a producer of food products

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

RICHARD A. MILLER
President, Chief Operating Officer 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
President, 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
Former Vice Chairman and Chief Administrative Officer of White Consolidated Industries, Inc., a diversified manufacturer of products for both consumer and industrial markets worldwide.

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

PHILIP L. KRUG
Executive Vice President

W. T. BEARGIE
Senior Vice President - Finance

ROGER Y. K. HSU
Senior Vice President - Law

WILLIAM D. MANNING
Senior Vice President - Sales and Marketing

ROBERT W. SCHER
*Senior Vice President - International**

JEAN-POL ARZUL
Vice President - Operations

GEORGE R. HILL
Vice President - Research and Development

DONALD L. MURFIN
Vice President

DOUGLAS W. RICHARDSON
Vice President

RAY A. ANDREAS
Corporate Controller

J. R. COOPER
Secretary

WILLIAM R. JONES
Treasurer

Transfer Agent, Registrar, and Dividend Disbursing Agent

National City Bank
P.O. Box 93201
Cleveland, Ohio 44101
(216) 575-2529

Annual Meeting

The Annual Meeting of Shareholders will be held at the offices of The Lubrizol Corporation on Monday, April 27, 1987.

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 as of February 10, 1987 was 8,957.

*Effective January 1987

THE LUBRIZOL CORPORATION

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

Transportation & Industry

Principal Subsidiaries

Lubrizol A.G. (Switzerland)
Lubrizol of Canada, Ltd.
Lubrizol de Chile, Ltda.
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 Australia (branch)
Lubrizol Italiana S.p.A.
Lubrizol Japan, Ltd.
Lubrizol Limited (England)
Lubrizol de Mexico, S. de R.L.
Lubrizol Scandinavia AB
Lubrizol Servicios Tecnicos S. de R.L.
Lubrizol South Africa (Pty.) Limited
Lubrizol Southeast Asia (Pte.) Ltd. (Singapore)
Nippon Lubrizol Industries Corporation (Japan)

LBD Asphalt Products Company

Affiliates

Industria de Aditivos do Brasil S.A.
Lubrizol India Limited
Industrias Lubrizol S.A. de C.V. (Mexico)
Lubrizol Transarabian Co., Ltd. (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
  Hazelwood, England
  Atsugi, Japan
  Wickliffe, Ohio

Agribusiness

Subsidiary

Agrigenetics Corporation
  Boulder, Colorado

Seed Divisions

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

Specialty Vegetable Oil Division

SVO Enterprises
  Columbus, Ohio

Affiliate

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

New Technologies

Subsidiaries

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