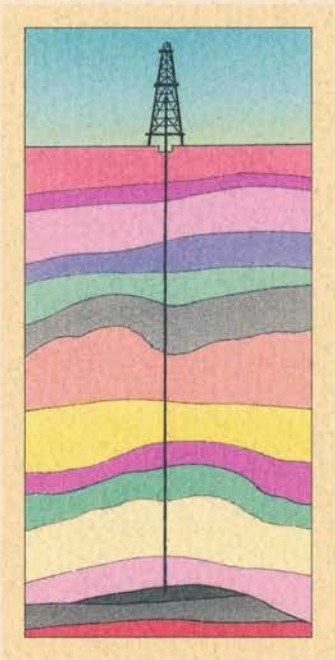
SCHLUMBERGER ANNUAL REPORT 1987



SCHLUMBERGER IN BRIEF

	1987	1986	1985
Revenue	**$4,727,019,000**	$ 4,938,420,000	$ 6,018,902,000
Income (loss):			
Continuing operations	**$ 502,560,000***	$(1,654,570,000)**	$ 977,650,000
Discontinued operations***	**(220,000,000)**	(363,021,000)	(626,614,000)
Before extraordinary item	**282,560,000**	(2,017,591,000)	351,036,000
Extraordinary item	**70,080,000**	—	—
Net income (loss)	**$ 352,640,000**	$(2,017,591,000)	$ 351,036,000
Income (loss) per share:			
Continuing operations	**$ 1.81***	$(5.76)**	$ 3.27
Discontinued operations***	**(0.79)**	(1.26)	(2.10)
Before extraordinary item	**1.02**	(7.02)	1.17
Extraordinary item	**0.25**	—	—
Net income (loss)	**$ 1.27**	$(7.02)	$ 1.17
Dividends declared per share	**$ 1.20**	$ 1.20	$ 1.20

**Includes nonrecurring credit of $222 million ($0.80 per share) resulting from the settlement of the U.S. offshore tax case and a gain of $69 million ($0.25 per share) on the sale of an investment in Compagnie Luxembourgeoise de Télédiffusion.*

***Includes nonrecurring charges of $1.74 billion ($6.05 per share).*

****Represents discontinued operations of Fairchild Semiconductor which had unusual charges of $486 million ($1.63 per share) in 1985.*

The predictions for 1987 that we made in last year's annual report were substantially accurate.

- Oilfield activity bottomed by mid-year and, by year end, activity was up or had begun to revive in all major areas around the world.
- The price of oil finally stabilized in a narrow range around $18 a barrel. Although there were and will be periods of price weakness, our clients and Schlumberger are learning to live with this level of volatility.
- Our industrial businesses, outside the oilfield, continued to prosper due to growing market penetration in Europe and the United States, and, to some extent, to the lower valuation of the dollar with respect to most other currencies.

These favorable developments clearly are reflected in Schlumberger net income which improved steadily during the year. Compared to the $2 billion loss in 1986, we had a profit of $353 million in 1987. Excluding from both years one-time charges and gains, and the discontinued Fairchild operations, our income from continuing operations was $212 million compared to $84 million a year ago. These improved results helped us to stabilize our work force, restore confidence and take care of some important pending issues.

- Nonperforming assets were sold, most notably Fairchild Semiconductor. We took a loss of $220 million on this transaction. This ended our eight-year diversification into the semiconductor business. However, we have retained part of the original Fairchild company purchased in 1979: aerospace and defense and automatic test. These are substantial and valuable assets.
- Our investment in the Compagnie Luxembourgeoise de Télédiffusion was sold for an after-tax gain of $69 million. This investment, which was acquired originally in 1970 as part of what is now Schlumberger Industries, did not fit into Schlumberger's plans for the future.
- We settled two financial issues which had been outstanding for a very long time. The first was an award to SEDCO from the Iran-U.S. Claims Tribunal which, after taxes and other expenses, amounted to a gain of approximately $70 million. The second was a settlement with the U.S. Government on the question of taxation of Wireline operations on the outer continental shelf during the years 1970 through 1986. As a result, we recorded an after-tax credit of $222 million.
- The two-year 25 million share repurchase program was completed in 1987 on schedule. The new program to purchase 20 million shares from time to time, beginning in 1988, will provide the flexibility needed in today's uncertain market.
- The Schlumberger name was extended to cover all our operating groups. We believe that this will increase our recognition by present and potential customers. In addition, our businesses should benefit from the name Schlumberger and its associations with financial strength, service, quality and integrity.

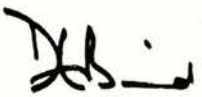
Two major uncertainties temper our confidence that the improvements we have registered in 1987 will carry over to 1988.

- First is the price of oil. As we said last year, there are plenty of good reasons for everyone, consumers and producers alike, to want price stability. Our expectation for 1988 is that oil price oscillations will be short-lived and will hold within a range from $15 to $20 a barrel. However, the petroleum industry is subject to many pressures, particularly political, which can easily cause disruptions.
- Second is the strength and stability of the world economy. Until the world's leading industrial nations demonstrate their resolve to deal effectively with the existing huge trade imbalances and resulting debt, we must remain extremely cautious. It would appear that little progress has been made since the warning shot fired by the world stock exchanges in October 1987. We cannot plan for the dramatic changes which upheavals in the world economy might cause, but we have streamlined our operations, we have shed nonperforming assets and we have become more pragmatic and more flexible, able to adapt quickly to new circumstances.

What can you expect from Schlumberger in the next few years?

- Steadily improving results as oilfield activity slowly increases worldwide. More oilfield activity offshore and in countries outside of North America, coupled with the ever growing importance of maximizing recovery of known reserves, will favor the strong, multinational, technically oriented oil service companies. In addition, our industrial businesses will pursue their successful efforts to penetrate markets in new geographic areas for their major product lines and will concentrate on a number of promising new products with significant growth potential.
- We will build on our strengths. In oilfield services, we have the range of companies we need for an integrated approach to our customers' problems. The success of the oilfield service industry in the early eighties was judged by its capacity to supply service, success in the nineties will be judged by the ability to help customers find and produce hydrocarbons more efficiently. The opportunities are many: improved drilling efficiency through measurement and control of the drilling process; improved cementing and stimulation techniques through wider use of data in design models, and the improved quality of logging and seismic data through real-time controls in the acquisition process. Both data handling and data integration will lead to an increased efficiency in managing and producing hydrocarbon reserves. Our industrial businesses will gain greater strength through their association with the Schlumberger name. By presenting a united image to all our clients we will enhance our ability to penetrate new markets. At Schlumberger Industries, our strong position in the water, gas and electricity metering businesses worldwide will allow us to exploit the opportunities offered by remote reading. At Schlumberger Technologies, integration of customer service and sales organizations will benefit our customer support on a wide range of technology products.
- Our internal productivity must continue to improve in all our businesses if we are to meet the strains of growing competition and volatility in the world economies. We must maintain our efforts to shorten the product cycle which not only reduces our overall research and engineering spending but brings new products faster to market. Progress has been made, but it remains a high priority. At the same time, whether it is wireline equipment or water meters, we will push for greater manufacturing efficiency throughout the organization. Reduced costs, lower inventories, more rapid response time in our manufacturing process, each will be a vital part of future improvements in our service to clients and in our results.
- Development of Southeast Asia will remain a priority for Schlumberger. We believe that Japan and the other countries of the Pacific rim in the medium and long term will constitute a major and growing market for both our oilfield services and industrial products. At the same time, the Japanese economic achievement, and its reservoir of knowledge and human talent, cannot be ignored by a truly international company.
- Finally, we must recognize and counter the unsettling effects that the turmoil of the 1980s has had on the oil industry and particularly its people. The exciting opportunities before us will only be realized if we can continue to attract and motivate outstanding people from all the countries where we work. Therefore, our highest priority is to identify, train and develop the people who will lead the company through the 1990s.

February 9, 1988



Euan Baird
Chairman & Chief Executive Officer

WIRELINE, SEISMIC & TESTING SERVICES

Wireline, Seismic & Testing Services has two principal activities:

- *Wireline & Testing Services*

Measurement of physical properties of underground formations to help locate and evaluate oil and gas reservoirs and assist in the completion, development and production phases of oil wells. Measurements are made by lowering instruments in the wells at the end of an electric cable called the "wireline".

Well testing; pressure measurements; completion and workover services; production services.

- *Seismic Services*

GECO (50% owned): Seismic data acquisition, processing and interpretation services to define subsurface geology.

Schlumberger Doll Research Center is located in Ridgefield, Connecticut.

Overall revenue in 1987 was 16% below that of the previous year. Oilfield activity continued to be affected by overproduction and fluctuating oil prices. The average number of drilling rigs worldwide was down 7%; a steep decline in the first half of the year was followed by a strong recovery later in the year, particularly in North America, as prospects for more stable oil prices improved. Throughout the two-year slump, drilling was concentrated on development of existing fields and in less costly areas. Marine seismic surveying also picked up considerably by year end. Prices for oilfield services remained under pressure due to industry overcapacity; however, more stable oil prices, a strong effort by Schlumberger to improve quality and the introduction of new technology aided a recovery during the latter half of the year.

Wireline & Testing Services

North America

Full year revenue lagged 4% behind 1986. However, as a result of a strong recovery during the second half of the year, revenue improved 51% compared to the first six months. In the U.S., the average number of active drilling rigs was down 4% from the previous year. Compared to 1986, the average of active drilling rigs in the fourth quarter was 28% ahead, at 1,156. As activity increased, oilfield services overcapacity disappeared in some markets and service prices firmed; in addition, recruiting of field engineers was resumed at midyear. In this environment, Schlumberger continued to gain market share. In Canada, the average number of active rigs was 180, about the same as in 1986. Activity declined steadily in the first six months but rose sharply in the second half of the year.

The drastic cost cutting and reorganizations, completed in 1986, reduced operating costs, improving both competitiveness and profitability. In 1987, additional steps were taken to improve operating efficiencies. Consolidations in both Manufacturing and Engineering reduced levels of management and cut back supporting functions.

Eastern Hemisphere & Latin America

(Australasia, Far East, Middle East, Africa, Europe, Latin America) Revenue declined 21% as activity shifted toward development drilling and lower-cost exploration. Prices for oilfield services remained weak. The average number of active drilling rigs was 10% below 1986 levels as exploration and development drilling continued to be affected by surplus production capacity in major areas.

Wireline & Testing service activity was down significantly, mainly in the North Sea, the Middle East and Asia; West and North Africa showed

small gains. Activity also increased in several South American countries and in Mexico. As a result of major consolidations undertaken in 1986, the average number of employees was down 19% with a positive impact on 1987 results.

Seismic Services – GECO (50% owned)

GECO revenue increased 17%. Marine data acquisition and processing, the company's main businesses, improved 7% due to higher activity in the Gulf of Mexico and the North Sea and to somewhat firmer service prices. Substantial gains were recorded in sales of marine seismic data and of Charisma II, an advanced interpretation workstation that has been acknowledged as the fastest and most user-friendly system available for helping geophysicists interpret seismic data.

Reorganizations and consolidations were implemented during the year and overhead costs were reduced significantly to make GECO more competitive in today's markets.

New Services and Technology

In today's oilfield environment, clients are striving to improve efficiency in locating, evaluating and producing hydrocarbon reservoirs. More than ever, they are looking to new technology to help lower costs in all phases of their operations. Newly introduced and improved services made important contributions to Wireline, Seismic & Testing revenue in 1987. Schlumberger Doll Research conceives new techniques which are then developed by engineering centers in Texas, Paris, Tokyo and Norway.

Among the important new developments:

- Marine 3D seismic surveys continued to expand at an accelerated rate. Over 60% of the total seismic data acquired by GECO now uses 3D technology. In exploration, 3D seismic gives a high-resolution three-dimensional picture of the underground structures which have the potential to trap oil and gas. Once hydrocarbons have been proved by exploratory drilling, 3D seismic also is used to improve the description of the reservoir structure.
- To improve the reservoir characterization and to precisely set on depth the high-resolution pictures made from surface seismic, walkaway well seismic surveys have now been introduced in several geographical areas. In a walkaway survey, a geophone array is positioned in the well by wireline while an acoustic source is moved around on surface. The use of the Downhole Seismic Array, a new tool with a string of geophones used in cased-hole wells, saves large amounts of rig time while making walkaway seismic surveys a cost-effective technique.
- A new dipmeter tool for use in oil base muds has been introduced in the North Sea, the Far East and the United States. Dipmeter surveys measure the angle, or dip, and the orientation of geological strata and are a key measurement in development drilling to optimize the positions of subsequent wells. The oil base mud dipmeter extends the use of this technique to wells drilled with oil base muds, a practice commonly used offshore.
- Schlumberger's Thermal Decay Time (TDT) tool is a nuclear instrument that measures water saturation in cased holes. TDT performance has been improved by two significant innovations that help correct for a diffusion effect which distorted the measurements of previous tools. This is achieved by firing the electrically controlled neutron source in dual rather than single bursts and by correcting the measurement by advanced signal processing in real time on the logging unit's surface acquisition system. As a result, the upgraded TDT provides a much improved estimation of the quantity of oil or gas in the rock pores.
- A new method to determine reservoir productivity – Layered Reservoir Testing – has been introduced in several areas with excellent results. The well is produced at several different rates while flow and pressure are monitored opposite the producing formations with a production logging tool. Computer processing yields the individual production potential of each interval. The technique improves the description of the reservoir's dynamic behavior and saves rig time.

DRILLING & PUMPING SERVICES

Drilling & Pumping Services has three main operating units:

- *Drilling Services*

Sedco Forex: Drilling offshore and on land.

- *Monitoring Drilling Operations*

Anadrill: Well-site computer analysis of surface and downhole drilling and geological data; directional drilling services; drilling tool rentals.

- *Pumping Services*

Dowell Schlumberger (50% owned): Well cementing and stimulation.

Schlumberger Cambridge Research is located in Cambridge, England.

Revenue of Drilling & Pumping Services was 18% lower than the prior year reflecting a reduced level of activity outside of North America in the early part of the year, together with continuing pressure on day rates of offshore drilling rigs. Pumping service revenue in North America, however, increased 11%, with a 46% gain over the prior year in the second half of the year, as price increases were gained through improved service quality and the introduction of new products.

Sedco Forex

Worldwide activity of the contract drilling industry in 1987 was slightly below the already severely depressed 1986 levels with average worldwide offshore utilization rates decreasing to 53% from 59% last year. The recent trend is more promising with a 1987 year-end utilization rate of 67% compared to 50% a year ago. Major areas of strengthening activity were the Gulf of Mexico, the North Sea and West Africa. For the drilling industry, the average number of active land rigs declined 2% in North America and 9% outside North America.

Industry-average day rates offshore deteriorated further in the first quarter from their low 1986 levels, but subsequently firmed in key areas with the Gulf of Mexico and the North Sea reaching levels, at year end, 30% above 1986.

As far as Sedco Forex is concerned, revenue declined 27% during 1987, reflecting the expiration of some older long-term contracts. The average number of active rigs decreased 9% as a slight increase offshore was more than offset by a 26% deterioration on land. Rig utilization rates were 73% offshore and 37% on land, compared to 64% and 47%, respectively, a year ago.

At the end of 1987, the Sedco Forex fleet consisted of 85 drilling rigs (46 offshore and 39 on land). During the year, six rigs were retired from service and one rig was acquired.

In 1987, field testing of the Sedco Forex computerized Management Drilling System (MDS) commenced; this system will provide increased drilling efficiency.

Anadrill

Anadrill revenue was down 11%.

In North America, revenue fell 7%, and outside North America, revenue was 13% lower. Although the two major services, Measurements While Drilling (MWD) and Drilling Services showed a significant increase in the number of jobs, prices per job deteriorated. Overall, the number of jobs was a record for the year. MWD revenue was up 1% while Drilling Services fell 18%.

As a result of market conditions, further reorganization was undertaken: the Middle East Division was eliminated as a management level; operations were terminated in ten countries and are being further reduced in five other countries. In North America, operations in the southern United States have been concentrated in Lafayette, Louisiana.

The second generation of MWD tools advanced from field testing to commercialization during 1987. The addition of a Drilling Mechanics component has started yielding excellent information about the downhole drilling process, thus creating the potential for several new interpretation products.

A very accurate surface sensor was developed for the measurement of mud flowing out of the wellbore during a drilling operation and prototypes were introduced to the field. This sensor can rapidly detect influxes from or losses to the wellbore to aid in safely controlling the well during drilling operations.

Dowell Schlumberger (50% owned)

Dowell Schlumberger worldwide revenue declined 8%; however, improvements were apparent during the second half of the year and fourth quarter revenue was up 23%.

In North America, pumping services and product sales revenue increased 11% for the year, including a 46% gain during the second half compared with the same period of 1986. Steady growth in drilling activity, with particularly strong improvements during the third quarter, coupled with improved prices, contributed to the increase. All major product lines grew. Geographically, most areas improved except Canada, which experienced an unusually strong 1986, and the northeastern United States where depressed natural gas prices curtailed drilling activity. Significant price increases were due primarily to improved service quality and the introduction of new products.

Outside North America, revenue fell 18%, mainly in North Africa, Europe, the Middle East and Indonesia. The fourth quarter results, however, were above last year in all major areas except the Far East. Pricing remained soft with some improvements noted in the more active areas. The offshore stimulation vessel BigOrange 10 was contracted to Petrobras offshore Brazil while the BigOrange 17 was reactivated and successfully posted offshore West Africa.

A set of computer programs to help design and evaluate pumping jobs is now being used extensively in over 150 Dowell Schlumberger client service centers worldwide. In addition, 140 Dowell Schlumberger field laboratories help design both cementing and stimulation jobs.

The Pod Blender, a programmable gel and proppant mixer, is now used on 20% of Dowell Schlumberger fracturing jobs.

Schlumberger Cambridge Research (SCR)

During 1987, SCR maintained its level of activity and the number of research programs remained constant. The strong cost control program, implemented in 1986, is still in effect and continues to show results.

Among the achievements of 1987 was the successful drilling of shale samples.

After an extensive search for suitable samples, nine drillable shale cores were obtained from a site in Yorkshire, England. They were drilled successfully in the Drilling Test Machine. Shale is responsible for about 70 percent of drilling problems but the drilling response of shale has never been comprehensively investigated. The precise determination of bit response while drilling shales, with varying pore pressures, promises to provide valuable information to Drilling & Pumping Services.

SCHLUMBERGER INDUSTRIES

Schlumberger Industries consists of five operating units:

- *Electricity Management*

Electricity meters and equipment for electric power distribution; load and rate management systems; network protection systems, instrument transformers for electric power transmission; remote meter reading and billing.

- *Water and Gas*

Water meters and distribution equipment; gas meters and distribution equipment; remote meter reading and billing.

- *Electronic Transactions*

Electronic payment terminals, smart cards, card operated public payphones; fuel dispensing systems; parking terminals.

- *Process Control and Transducers*

Process control equipment; nuclear valves; transducers.

- *Defense Systems*

Data acquisition and magnetic tape recording systems; signal processing and electronic countermeasures systems; control equipment for nuclear power systems; miniature CCD cameras and high-performance reconnaissance cameras; training systems.

Schlumberger Montrouge Research is located in Montrouge, near Paris.

In order fully to take advantage of Schlumberger's reputation worldwide, the entity "Schlumberger Industries" was created. In July 1987, all the activities previously known as Measurement & Control were merged within this new entity. The test and measurement activities of the Instruments division were transferred to Schlumberger Technologies.

Excluding activities acquired or discontinued during 1987, revenue and orders of Schlumberger Industries increased 13% and 11%, respectively; when expressed in national currencies, revenue was up 4% and orders were basically flat. Backlog was in excess of five months at year end. Capital investment increased $3 million to $74 million.

Unless otherwise specified, comparisons given below refer to U.S. dollars.

Electricity Management

Revenue and orders were both up 5%, expressed in national currencies, due to improved markets for metering products. Sales in the U.K., Canada and Brazil were particularly strong as a result of demand for domestic meters, combined with the introduction of new electronic products.

In North America, revenue and orders were up 5% and 13%, respectively; sales of new electronic products now represent 11% of billings and have offset declining demand for electromechanical products and lower average selling prices for residential meters.

In Europe and Latin America, revenue and orders improved 5% and 4%, respectively, when expressed in national currencies. Network Control and Transformers sales remained close to the previous year, despite lower demand for high voltage products in France; significant growth in Brazil offset reduced activity in Mexico.

An Automatic Meter Reading business group was set up in the U.S. to exploit this growing market. In France, a remote meter reading prototype, Euridis, was delivered to Electricité de France, the state owned utility company.

Water and Gas

In 1987, three water meter manufacturers were acquired: Neptune International, a major U.S. manufacturer; Conteuro Rigas in Italy and Congermania in West Germany. Excluding these acquisitions, revenue was up 15% (6% in national currencies).

The Bridgeport factory of Sprague, the U.S. gas meter manufacturer, was closed and all production transferred to the newly expanded facility at Owenton, Kentucky.

Neptune was awarded the contract for a substantial installation of remote water meter reading systems in Spring Valley, New York.

The automated Gallus 2000 gas meter factory in Reims, France was completed and 80,000 meters were delivered to Gaz de France. Service activities in France continue to perform strongly.

A licensing agreement was completed to produce domestic gas meters in the U.S.S.R. A joint venture to manufacture gas meters in South Korea was signed with Daesung.

Electronic Transactions

Revenue increased 17% and orders 25%, when expressed in national currencies.

The largest revenue gain, 28% in national currencies, was from Koppens fuel dispensing systems, particularly in the U.S. and Spain. A new computer-based gasoline station system was introduced along with a new dispenser design.

Sales of smart cards and systems were up 18% in national currencies; annual smart card manufacturing capacity is now 20 million, the world's largest. A new microprocessor-based smart card was introduced; new applications for these cards include secure access to computer networks and proprietary cards for prepaid movie admissions.

Urban Terminals and Systems revenue was up 7%, expressed in national currencies, as higher sales of parking terminals more than offset declines in other product lines. Key orders for parking terminals were obtained in the United States, Italy and Ireland. Significant orders were booked in Italy and Spain for the new product line of mass transit payment systems, based on cards.

Process Control and Transducers

Excluding discontinued activities, revenue decreased 4%, when expressed in national currencies, due to slowdown in the nuclear industry and stagnation in other markets.

Process Control revenue was flat in national currencies, despite a significant increase in digital systems and the successful introduction of the 8000 Series pressure transmitter.

Transducers revenue was unchanged, when expressed in national currencies; modest growth in the aerospace industry, especially in Europe, offset the decline in other markets.

Defense Systems

Revenue was up 5% with shipments from a strong U.S. backlog, particularly in communications countermeasures and imaging systems. This more than offset reduced European aerospace and defense revenue.

The impact of government policies on both U.S. and European operations has effectively lengthened the procurement cycle and resulted in program award delays.

Despite the projected U.S. Government defense spending cuts, demand remains strong in the specific sectors served by Defense Systems.

Schlumberger Montrouge Research

Schlumberger Montrouge Research performs applied research in three areas of interest to Schlumberger Industries – electronics, transducers and information systems.

In 1987:

- A novel nuclear imaging technique with immediate application for container inspection was successfully tested and a new business group created to exploit it.
- A prototype of a high accuracy standard electricity meter for meter calibration was produced.
- A low power electronic read out, powered by a lithium battery with a 15-year life, was developed for water meters, with applicability to remote reading.

SCHLUMBERGER TECHNOLOGIES

Schlumberger Technologies consists of four operating divisions:

- *Automatic Test Equipment (ATE)*

Systems for testing and design verification of semiconductors and printed circuit boards.

- *Computer Aided Design and Manufacturing (CAD/CAM)*

Software and computer systems for design and manufacturing processes of mechanical and electronic products.

- *Graphics*

Plotters to print images generated by computers.

- *Instruments*

Electronic instruments for design verification, test and measurement, particularly in telecommunication and mechanical industries.

Schlumberger Technologies has a central laboratory located in Palo Alto, California.

In July, the business group previously known as Computer Aided Systems was renamed Schlumberger Technologies. Sentry and Factron were merged into the Automatic Test Equipment (ATE) division, Applicon became the Computer Aided Design and Manufacturing (CAD/CAM) division and Benson became the Graphics division. At the same time, Solartron Instruments in the U.K. and the Instruments divisions of Schlumberger Industries in France and Germany were merged into Schlumberger Technologies as the Instruments division.

The purpose of these changes was to capitalize on the Schlumberger name and create synergies in technology, particularly software, and in field operations that will mutually reinforce the presence of the divisions with their customers. The first step in that direction was the creation of a 500-person strong common customer service unit in North America which will service all Schlumberger Technologies products.

Schlumberger Technologies revenue was level with that of 1986 and orders were up 3%. Both revenue and order rate grew in the fourth quarter, primarily due to improvements in European sales of automatic test systems for semiconductors and graphics products. In North America, revenue for the year was down 14% and orders declined 14%. Outside of North America, revenue and orders were up 7% and 12%, respectively; expressed in national currencies, they were down by 9% and 5%.

Automatic Test Equipment

Automatic Test Equipment (ATE) revenue was flat and orders were up 10% with test systems in North America showing some growth in 1987. The IDS 5000, a sophisticated integrated diagnostic system for testing VLSI devices using an electron beam probe, was introduced in June and met with considerable industry acclaim. Initial sales were promising but slowed toward year end as semiconductor industry research and development expenditures slackened.

In September, it was announced that all Schlumberger Technologies ATE manufacturing in the U.S. would be consolidated in a single state-of-the-art facility in Simi Valley, California in 1988, to meet market demand for increased quality and performance at competitive prices.

Computer Aided Design and Manufacturing

At Computer Aided Design and Manufacturing (CAD/CAM), revenue and orders were down 17% and 18%, respectively, for the year, reflecting severe competition in the North American market. However, orders have increased for two consecutive quarters, exceeding revenue, so that by the fourth quarter the book-to-bill ratio showed substantial improvement.

BravoDraft, a low-cost detail drafting system, was introduced in September. In addition to being supported on the full range of high-performance Schlumberger graphics stations, BravoDraft also will run on the new line of DEC VAX/VMS desktop workstations; BravoDraft is compatible with the Schlumberger Bravo3 CAD system.

A new surface modeling package representing a significant addition to the CAD product line also was launched in 1987.

Graphics

Graphics revenue was up 20% and orders 31%, primarily due to strong sales of pen plotters in Europe. Bookings of the main pen plotter lines grew by 67%, owing to two new models introduced in 1987 and the continuing expansion of a dealer network in Europe; Schlumberger pen plotters gained market share in most European countries. However, as a result of the weaker U.S. dollar, competition has become intense, both in Europe and the U.S.

A new family of PC compatible, desktop products is being introduced; three new models, including pen plotters and digitizers, have been added in 1987, considerably reinforcing Schlumberger's position in that market segment.

Monochrome electrostatic plotter manufacturing was concentrated in the Guérande facility in France, resulting in a significant improvement of over-all manufacturing cost and efficiency.

Instruments

Instruments revenue was up 11% and orders were down 4% as the second half of 1987 showed some improvement over the first half of the year.

Sales of general electronic instrumentation (oscilloscopes, universal counters, signal generators) deteriorated steadily, confirming a worldwide trend toward computer-based, application-specific instruments.

Schlumberger has actively pursued this emerging market with the development of small systems automatic test equipment such as the 635 printed-circuit board tester, the 4031 Stabilock radio communication test set, the 1202 Structural Analyzer, and the Optical Time Domain Reflectometer (OTDR), the latter being an optical fiber test instrument noted for its ease of use.

An extensive cost reduction plan is being implemented at present, primarily in France, in order to align the business with demand.

Schlumberger Technologies Laboratories

During 1987, the principal research activities were concentrated on several major computer software projects with broad applicability to the future goals of Schlumberger Technologies businesses.

Further progress was made in the development of Hyperclass, an object-oriented programming system. This type of system, based on artificial intelligence techniques, has broad applications, since it enables engineers to represent human knowledge in a format that the computer can manipulate. An agreement was signed with Sun Microsystems giving Sun the rights to use Hyperclass in their Symbolic Programming Environment.

The Knowledge Based Computer Aided Engineering group is exploring ways to allow designers to capture more completely their designs in computers and also to enter engineering textbook knowledge into the computer in a way that can be applied to the solution of specific problems.

Work is continuing on image processing with applications to visual inspection tasks in a manufacturing environment. The emphasis is on shape recognition and stereo matching using scale space filtering.

OILFIELD SERVICES

Wireline, Seismic & Testing Services

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Pumping Services

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MEASUREMENT & SYSTEMS

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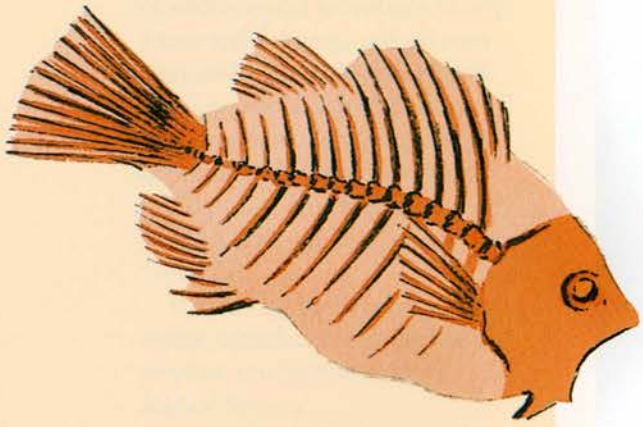
A SIMPLIFIED GUIDE TO OILFIELD SERVICES

Finding and producing oil at a profit is a complicated, expensive business. The process involves six major steps:

- WHERE TO DRILL.
- DRILLING THE WELL.
- EVALUATING FORMATIONS IN A NEWLY DRILLED WELL.
- LOG DATA TRANSMISSION, PROCESSING & INTERPRETATION.
- FROM BOREHOLE TO PRODUCING WELL.
- STIMULATING PRODUCTION.

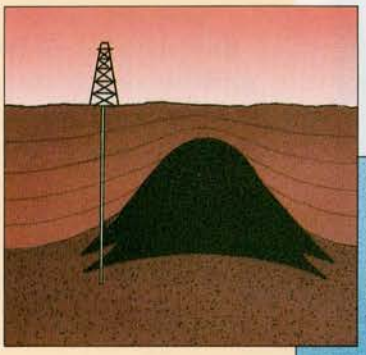
Success at every stage depends largely on Schlumberger Oilfield Services. How the oil company goes about its business and how Schlumberger contributes to the process is explained in simple terms in the next section of this report.



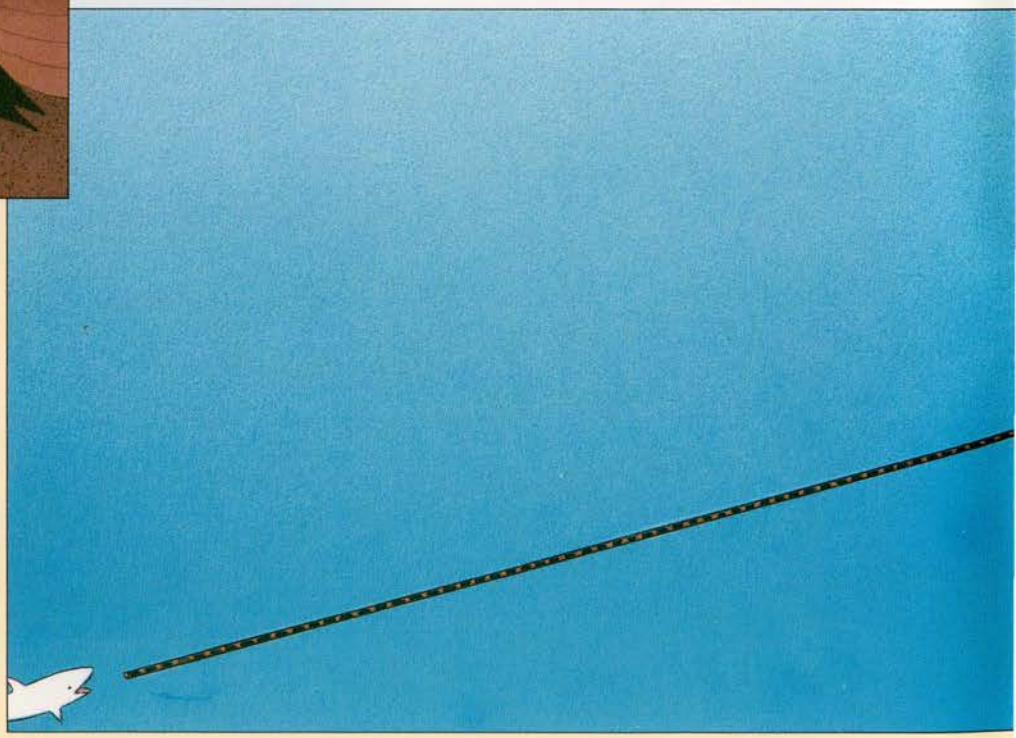
WHERE TO DRILL

Sophisticated measurements made from the earth's surface and in boreholes enable oil companies to make informed guesses about the location of hydrocarbons as far as six miles below the surface. This hunt for hydrocarbons begins by searching for the kinds of rocks that contain oil and gas — rocks made of sand, silt, clay, sea shells or the remains of corals, called sedimentary rocks. Oil and gas form when organic material is buried in sediments and undergoes certain chemical reactions over millions of years. During this time, the sediments are compacted and grain by grain cemented to form a porous sedimentary rock. This rock becomes a trap if the hydrocarbon-rich reservoir is overlaid by impermeable cap rock, which prevents the oil or gas from escaping.

Only drilling a well can confirm the presence of oil or gas, but various sensing techniques can find potential hydrocarbon traps. The most important such tech-



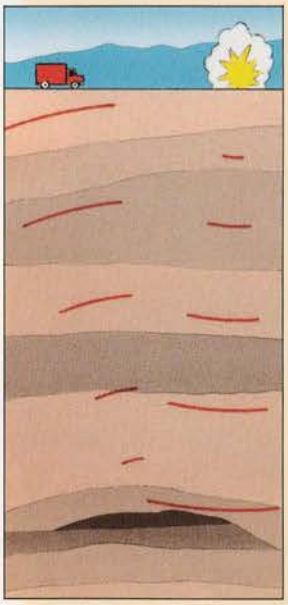
An oil trap consists of impermeable cap rock overlaying a porous reservoir rock, soaked with hydrocarbon (dark area). Cap rock is typically shale, a fine-grained rock formed by the compaction of silt, clay or mud. Reservoir rock is usually sandstone, limestone or dolomite.



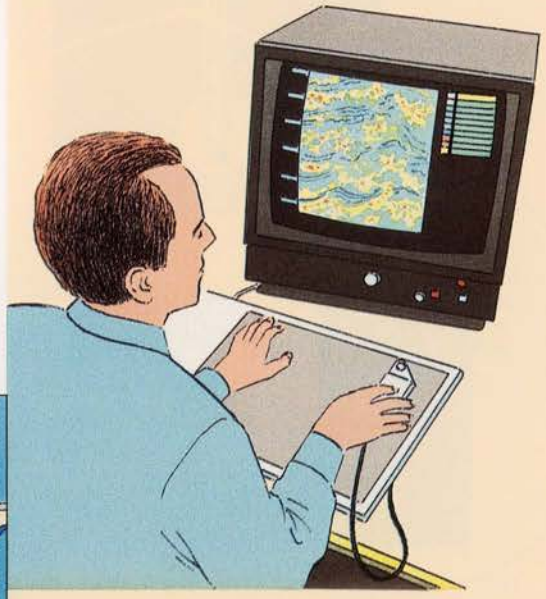
A seismic survey ship tows air guns and, further behind, a streamer cable containing thousands of hydrophones which pick up sound echoes from deep within the earth. The latest technology employs two streamers for 3-D seismic surveys. The air guns are fired periodically as the ship sails on precisely navigated lines. Hydrophone data are recorded on board.

nique is seismic surveying, which takes advantage of the fact that sound travels at different speeds in different types of rock.

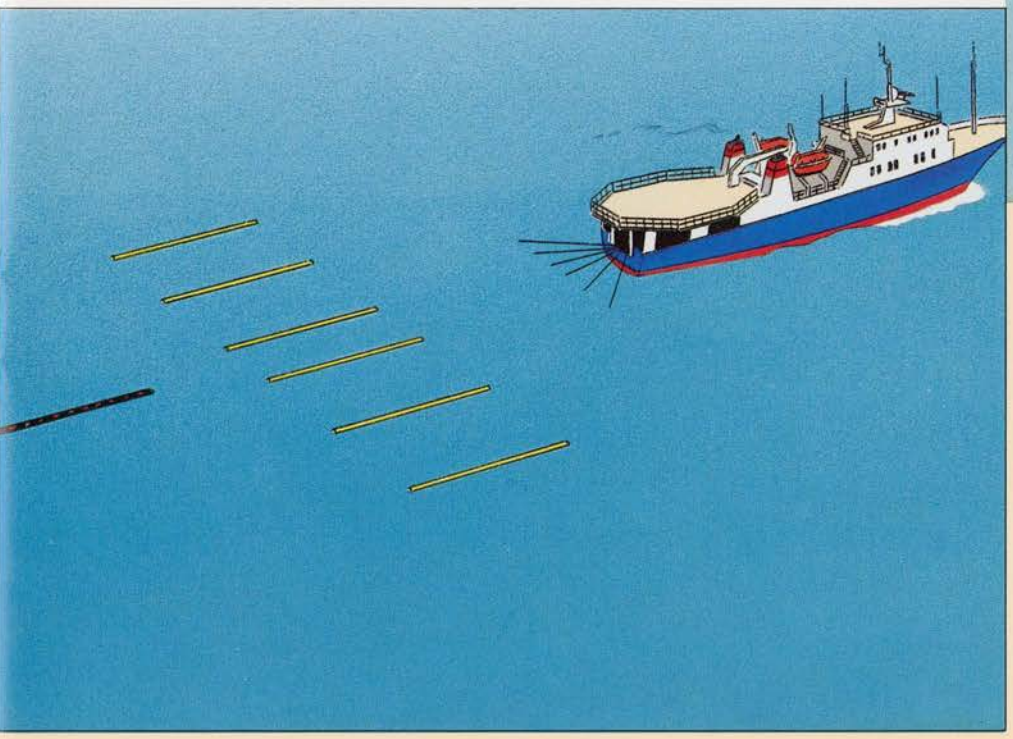
A seismic survey starts by emitting sound waves in the earth. On land, this is done by setting off small explosions or by vibrating the earth's surface with 2- or 3-ton weights. Offshore, a specially equipped seismic survey ship tows up to 50 air guns over the area to be surveyed. The guns fire blasts of compressed air, sending sound waves through the water and deep into the rock beneath the seabed. Both offshore and on land, echoes bouncing back to the surface are detected by listening devices. The timing of the returning echoes is recorded and displayed on a seismic section, a plot of echo reflection on one axis and horizontal distance on the other. By seismic section interpretation, geophysicists can locate boundaries between different rock types. This narrows the search to geologic structures that may be hydrocarbon traps that merit test wells.



In land seismic surveying, a sound wave is generated by vibrating the earth's surface or, as shown here, by setting off a small explosion. As sound waves travel into the earth, they produce echoes as they cross the boundaries between different rock types. Sensors at the surface detect these echoes and time their arrivals. Since sound travels at different speeds in different rock types, the timing of the echoes' arrivals indicates the location of the boundaries between different rock types.



Hundreds of billions of data points may be generated by an offshore survey. These points must be processed in a large computer and converted into a graphical plot (seismic section) which delineates subsurface geological boundaries. With the aid of Charisma, an interactive workstation, the geologist can interpret this map, assigning geological identification to the strata.



The driller can call up any drilling data, surface, downhole or combinations of these, on a display mounted over his control console. Usually, he wants directional measurements, which originate from a downhole measurements while drilling (MWD) tool, to monitor the track of the drill bit.

DRILLING THE WELL

Seismic and geological surveys show where the oil reservoir could lie underground. Drilling a hole down to it is the only way to know for sure.

When you're talking about a hole that is miles deep, the well must be carefully constructed, like a vertical pipeline to the oil. The factory to build the well is the rotary drilling rig.

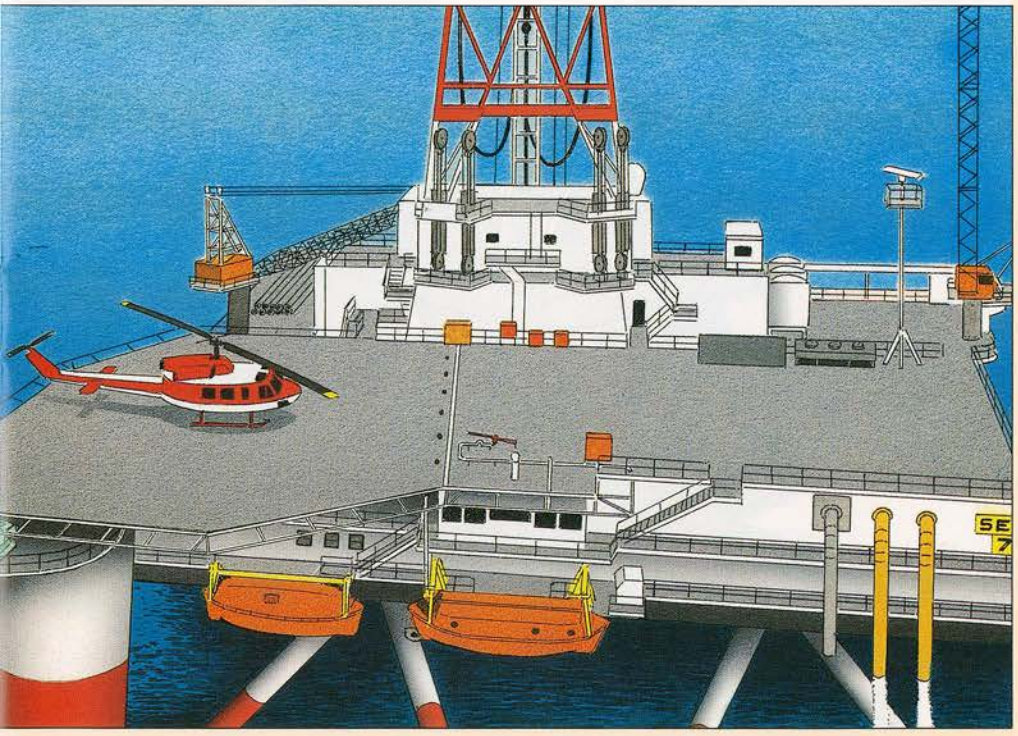
A modern rotary rig performs three essential functions: hoisting or lowering the drill pipe as needed, rotating the drill bit and applying enough weight to allow the bit to crush the rock, and circulating drilling mud for lubrication, to counterbalance formation pressure and to carry rock cuttings back to the surface.

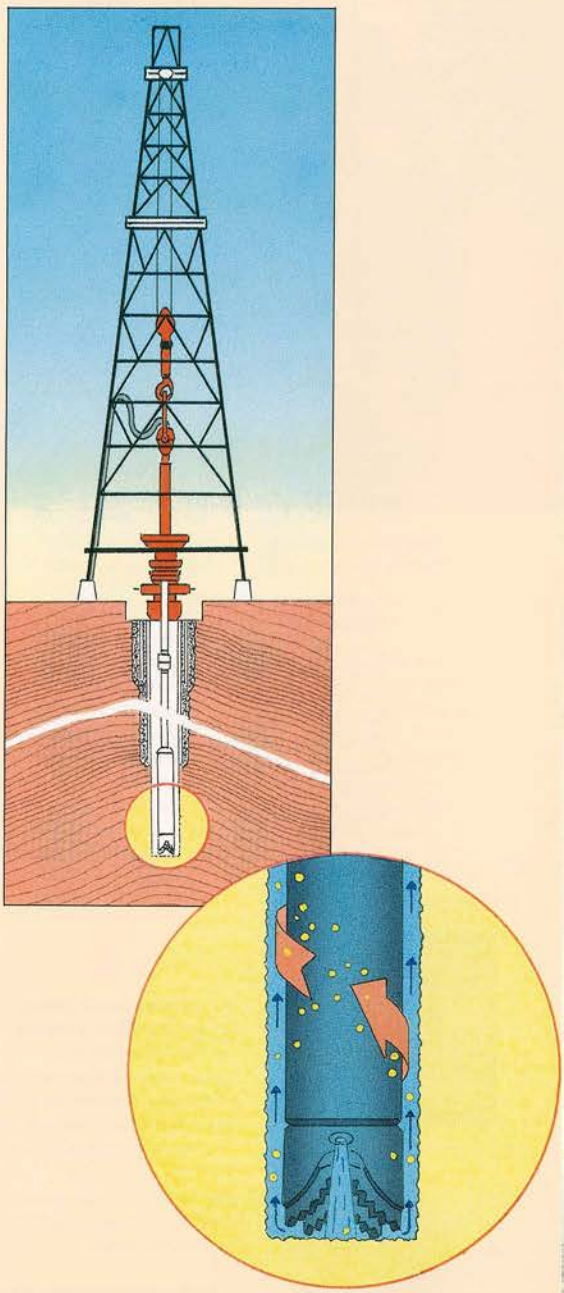
The drill bit, or rock bit is screwed into the end of the drill string, a series of connected 30-foot long high-strength steel pipes. Up on the rig floor, a motor-driven rotary table turns the drill string and the bit; lengths of drill pipe are added as the hole deepens.

A versatile rig for offshore drilling is the semisubmersible rig. The rig rides on huge pontoons to a drilling location, generally in several hundred feet of water. At the location, the pontoons are partially flooded, increasing the draft by 60 feet to create a stable drilling platform, even in rough seas. Such units can drill to depths of 25,000 feet in up to 6,000 foot deep oceans.

Rock cuttings are flushed away from the drill bit and out of the hole by a steady flow of drilling mud that is circulated down the drill pipe and up the borehole outside the drill string.

Drilling can be expensive, hazardous and even unsuccessful if the hole misses target. For these reasons, measurements of the drilling process as it occurs are essential. On the rig floor, typical measurements are rotary speed, rate of penetration of the drill and total hook load. Downhole measurements near the bit might include torque and weight on bit, mud temperature, hole direction and formation evaluation data, such as rock radioactivity and resistivity. These data are transmitted to the surface in seconds by means of coded pressure pulses in the drilling mud. Combining and interpreting all these data improve drilling efficiency, warn of dangerous fluid overpressures, keep track of hole direction and give a first indication of drilling into a hydrocarbon bearing zone.





On the surface, the derrick and hoisting equipment must be capable of raising and lowering a million pounds of pipe. More than 6,000 kilowatts of electricity (enough power for a small city) are needed to pump drilling mud, rotate the drill pipe and operate hoisting equipment.

At the bottom of the hole, heavy pipes (drill collars) above the drill bit add weight to the lower end of the drill string; the weight on the bit presses it against the rock face, and drill string rotation causes the toothed cones of the bit to turn, cutting and breaking off rock chips; drilling mud flows down the drill pipe and jets out of the bit, washing away the rock chips which are carried to the surface in the mud stream.

As the logging job starts, a Schlumberger engineer guides the logging tool or sonde as it is lowered into the hole. The sonde is lowered to the bottom of the borehole and data recording starts as the sonde is pulled back up toward the surface.

EVALUATING FORMATIONS IN A NEWLY DRILLED WELL

Once a well is drilled, the oil company must locate hydrocarbon reservoirs and decide whether to produce them. This depends on how much oil and gas are in the reservoir and how much it will cost to extract.

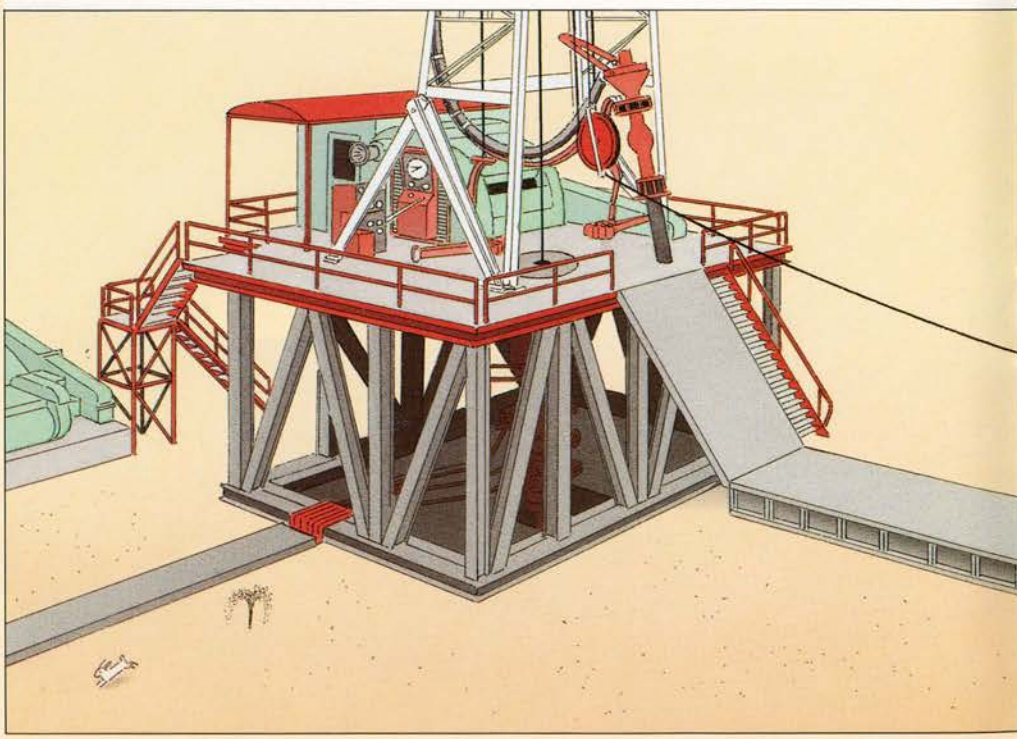
Estimating hydrocarbon reserves requires knowing three variables: reservoir porosity, hydrocarbon saturation, and reservoir volume. Reservoir porosity is the percent of rock that is pore space, not rock grains. Since the rock pores contain fluids, porosity determines how much oil, gas or water a given volume of reservoir rock can hold. Porosity varies with rock type, but can be fairly high in the major hydrocarbon bearing rocks: sandstone, limestone and dolomite. Hydrocarbon saturation is the percent of the fluids in the pores that is oil or gas versus water. Nearly always, the rock contains water, sometimes more than oil. Reservoir volume is the product of the thickness of the oil bearing rock and its area. Producibility is determined by

The uppermost layer of the Grand Canyon in northwestern Arizona is mostly a sandstone, laid down about 225 million years ago. The sand was compacted by its own weight and transformed into stone as the grains were cemented together.

a chalky limestone formed about 70 million years ago by the deposition of microscopic skeletons of plankton, minute organisms that float in the sea. The main component of limestone is calcium carbonate, a calcium atom with three atoms of oxygen and one of carbon.

The distinctive sawtooth ridges and rocky pinnacles of the Dolomites in the northeast part of the Italian Alps, the place where dolomite was first recognized. Dolomite is formed when magnesium partially replaces calcium in limestone.

The white cliffs of the Straits of Dover, on the southern English coast, are

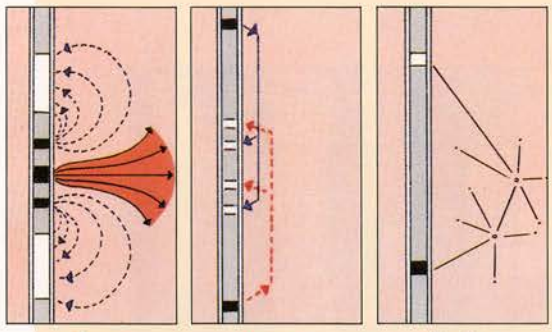


how easily oil or gas flows through the rock pores.

This information is obtained by wireline logging. Periodically, drilling is halted to allow a mobile laboratory (CSU) to lower electronic measuring tools and samplers into the well on an armored cable called a "wireline". As these long, cylindrical logging tools are pulled from the bottom of the well toward the surface, they continuously send back measurements of the physical parameters of the rock formations that they encounter. These data are recorded on magnetic tape and plotted on a graph called a log.

The most widely used wireline techniques measure electrical, acoustic and nuclear properties of formations. Other wireline tools can recover samples of reservoir rock or fluids contained in the pores.

A technique called drill-stem testing permits a preliminary evaluation of the production potential by allowing hydrocarbons to flow for a short period while measuring downhole pressures.

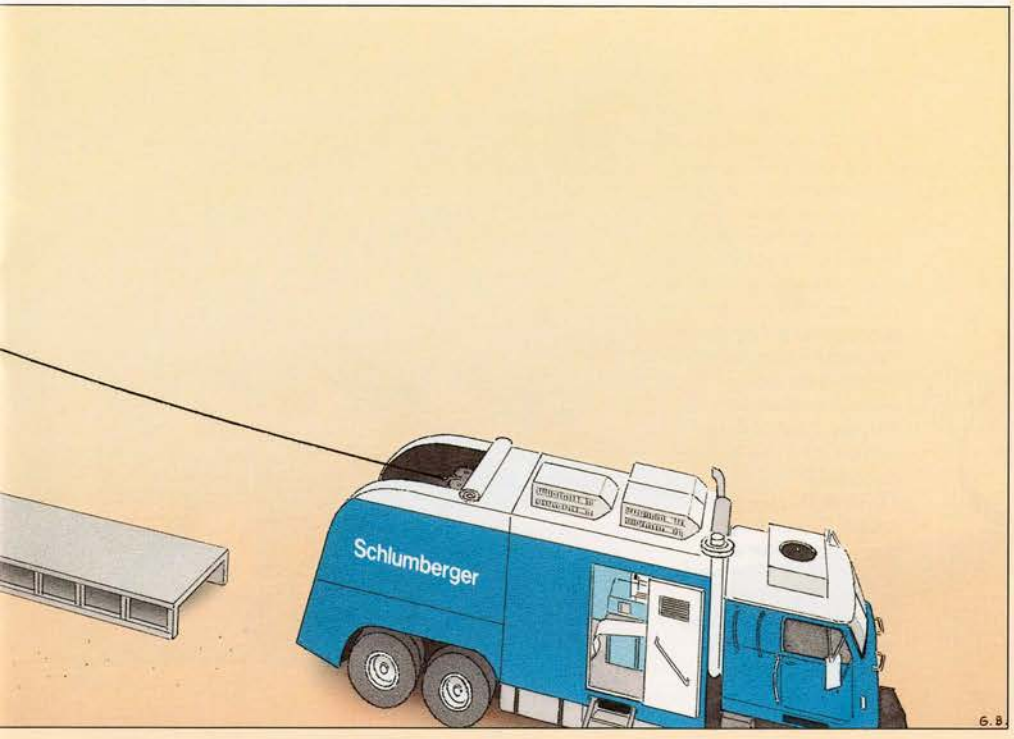


Electric *Acoustic* *Nuclear*

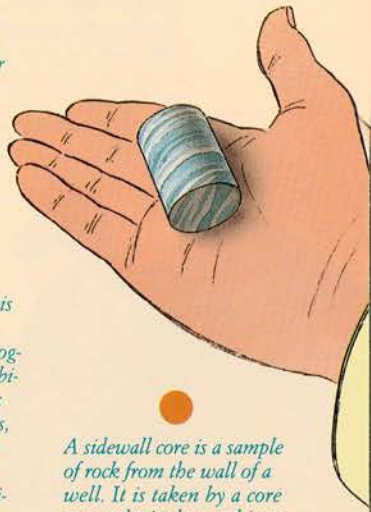
Electric properties: the behavior of rock in response to an electric current. Electrical logging and induction logging are used mainly to distinguish oil-bearing rock from water-bearing rock. These techniques measure formation resistivity — how much the formation resists the flow of electric current. High resistivity usually indicates the presence of hydrocarbons in the rock pores. Low resistivity, on the other hand, may mean that the rock contains salt water, which conducts electricity.

Acoustic properties: the behavior of rock in response to sound waves. In sonic logging, a sound wave is transmitted into the rock and the time it takes to reach a receiver and how well the rock carries the signal are measured. This tells much about the structure, lithology, porosity and fluid content of the rock.

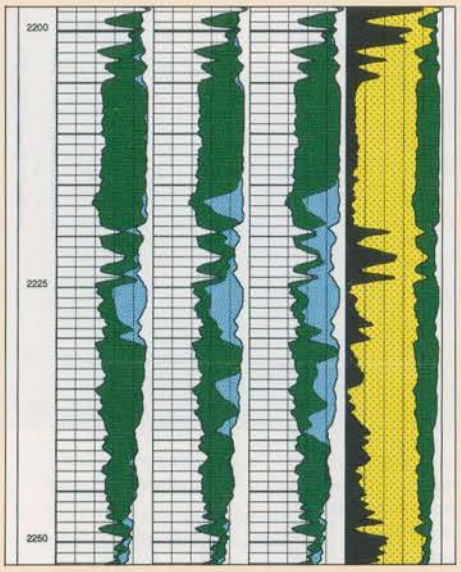
Nuclear properties: the behavior of rock on the level of the atomic nucleus. In nuclear logging, both the natural radioactivity and the radioactivity induced by bombarding the rock with various nuclear particles are measured. Nuclear techniques detect shales and indicate rock density and hydrogen content. This information helps identify lithology, porosity and type of hydrocarbon.



This wellsite unit (CSU) is a self-contained mobile laboratory for wireline logging. It can lower a combination-string of up to six different measuring tools, 60 or 70 feet long, into a borehole more than five miles deep. A field engineer can observe the measurements in real time on a monitor, and record them on magnetic tape and film for later detailed analysis. Twin high-speed computers aid in data processing and delivery of computed interpretations on the spot.



A sidewall core is a sample of rock from the wall of a well. It is taken by a core gun, a device lowered into the well on a wireline cable. The gun fires a cylindrical, hollow bullet into the wall. Wires attached to the bullet pull it back into the gun, which is returned to the surface with the rock sample.

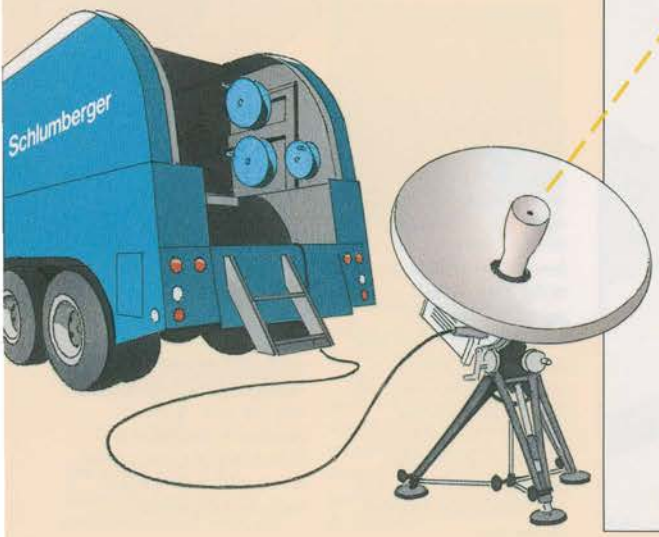


Part of a computer-processed log interpretation from a North Sea well:
On the right is the original interpreted log run in the newly drilled well showing the relative volumes of shale (black), sand (yellow), oil (green), and water (white). The three nuclear logs on the left were made in the producing well over a two-year period, long after initial production (earliest log on the left). These logs show how the water table (light blue) has risen, as the oil has been produced, and the amount of oil bypassed during primary production.

LOG DATA TRANSMISSION, PROCESSING AND INTERPRETATION After a series of logs have been recorded by the CSU logging unit, the data can be transmitted from the well site directly to multiple locations, anywhere in the world, simultaneously. Data can be received, even from the remotest location, within an hour after logging.

In North America, the data transmission system is called LOGNET. Each logging unit has its own four-foot diameter satellite antenna which transmits log data via communications satellite to a central hub facility. From there, the data are routed to client offices and to Schlumberger Field Log Interpretation Centers (FLIC). Outside North America, there are many possibilities for data transmission such as the commercial INMARSAT worldwide satellite network, microwave or telephone systems.

LOGNET brings to the client in his own office either the logging data from the well site or the interpretation



LOGNET satellite log data transmission starts from the CSU at the well site where a transportable 150-pound dish is aligned with the SBS-3 communication satellite orbiting 23,000 miles over the equator. Schlumberger shares this satellite with the NBC television network and other users. Up to 24 simultaneous transmissions can be made at one time, from different locations.

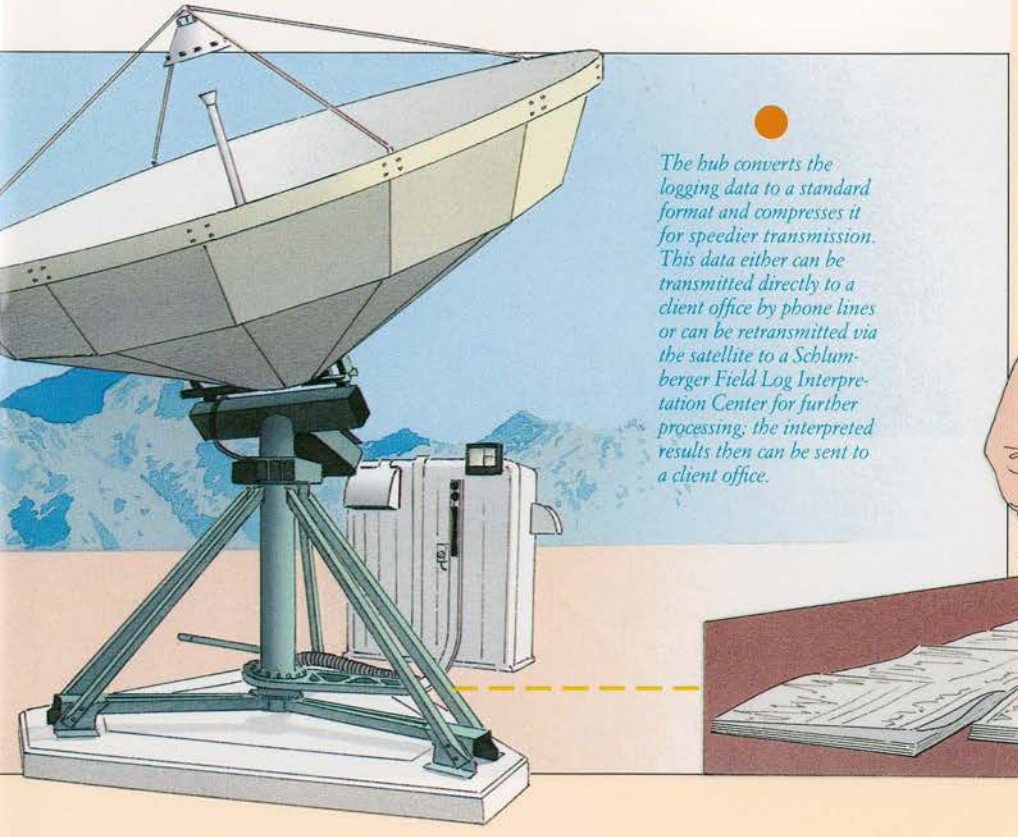
The satellite relays the log data down to the hub station about 30 miles north of Denver, Colorado. Dominated by a satellite dish, 30 feet in diameter and about 40 feet tall, the hub is both a clearinghouse and a warehouse for log data beamed from well locations throughout North America.

results from a Schlumberger FLIC. Client offices also can be equipped with computer workstations where data can be processed using the entire range of Schlumberger interpretation programs. Today in North America, 80% of remote and offshore wells and 30% of land wells logged by Schlumberger use the LOGNET service.

Log data processing and interpretation are performed in different locations and with varying objectives:

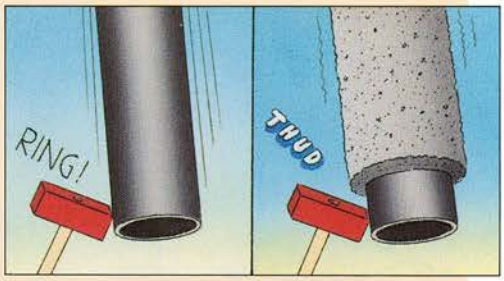
- At the well site, using the CSU computers, data processing is aimed at verifying log quality and providing a quick-look evaluation of the presence of hydrocarbons in the well.
- At the FLIC or client office, experts interpret the logging data to determine quantitatively reservoir parameters such as amount of oil in place, producibility and rock characteristics. Also, other information of interest to geologists, geophysicists and engineers can be derived using specialized interpretation programs.

Standard Schlumberger software interpretation packages can be run on most engineering workstations giving clients the option of processing logging data in their own offices.



The hub converts the logging data to a standard format and compresses it for speedier transmission. This data either can be transmitted directly to a client office by phone lines or can be retransmitted via the satellite to a Schlumberger Field Log Interpretation Center for further processing; the interpreted results then can be sent to a client office.

Logs can be analyzed by clients in their offices, less than one hour after they were recorded at the wellsite.

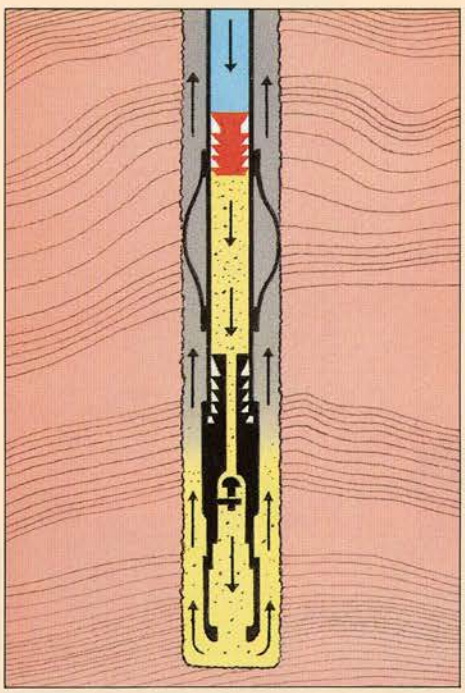


The cement bond test is simple, in principle: when unbonded casing is tapped, it is free to ring like a bell; in cemented casing, the acoustic signal is damped. The principle of cement bond logging is identical but an acoustic transmitter replaces the hammer.

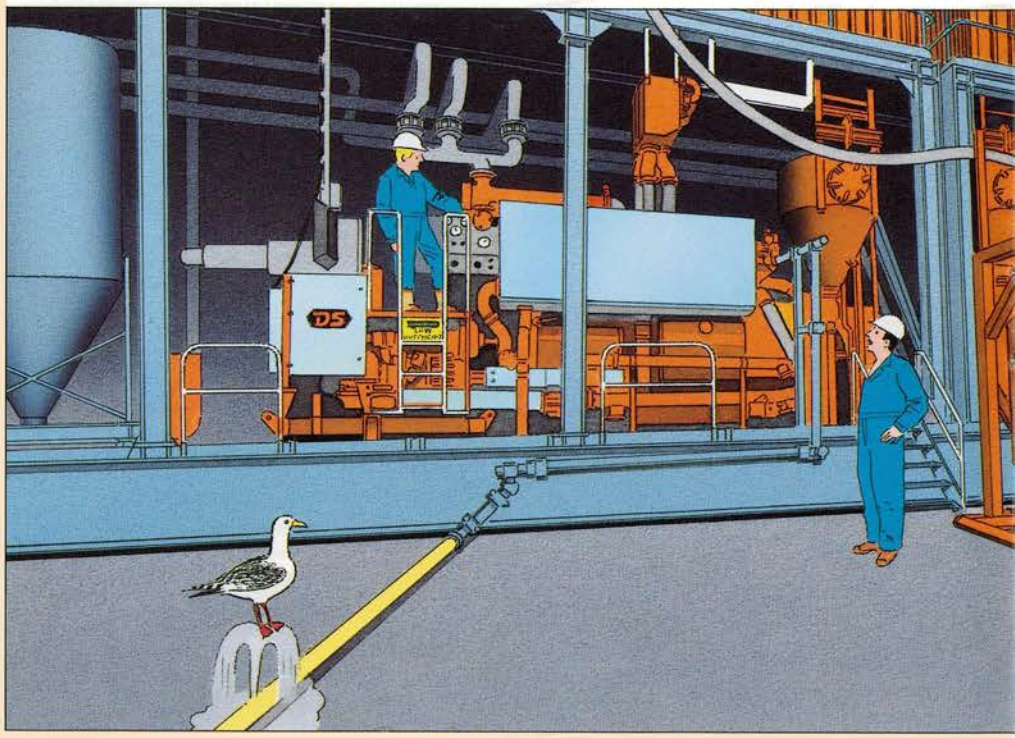
Success! Wireline logs and well tests confirm that producible oil and gas have been found. The next step, well completion, is to convert the borehole, filled with drilling mud, into a clean, secure pipeline connecting the oil reservoir to surface production facilities. Steel pipe, called casing, is installed from the surface to the bottom of the well and sealed into the borehole by cementing it to the well bore. This casing keeps the hole from collapsing, and also seals off hydrocarbon producing zones.

To set casing, pumping equipment mixes the cement with liquid and solid additives and pumps it down into the casing and up into the space between the casing and rock formation.

After the cement has hardened, it is necessary to check that the cement forms a perfect seal between the rock formations and the casing. Wireline services provide this evaluation by sending an acoustic signal into



After the steel casing is lowered into the well, it is cemented into the borehole to seal the well bore. A cement slurry (yellow) is pumped down the casing ahead of a tight fitting plug (red) that acts as a piston pushed down by a displacement fluid (blue). The cement flows out the bottom and up the outside of the casing, filling the annular space between the casing and borehole wall. When the plug pushing the cement reaches bottom, pumping stops and a one-way valve closes preventing the still-wet cement from flowing back up inside the casing.

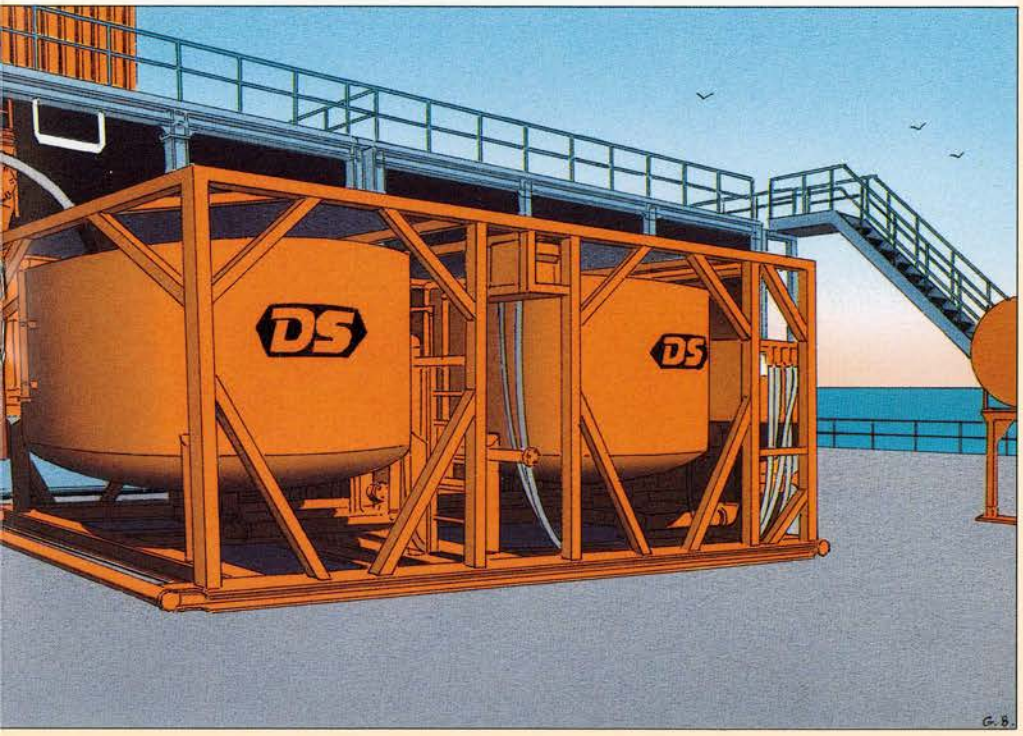


the casing to measure the integrity of the cement bond.

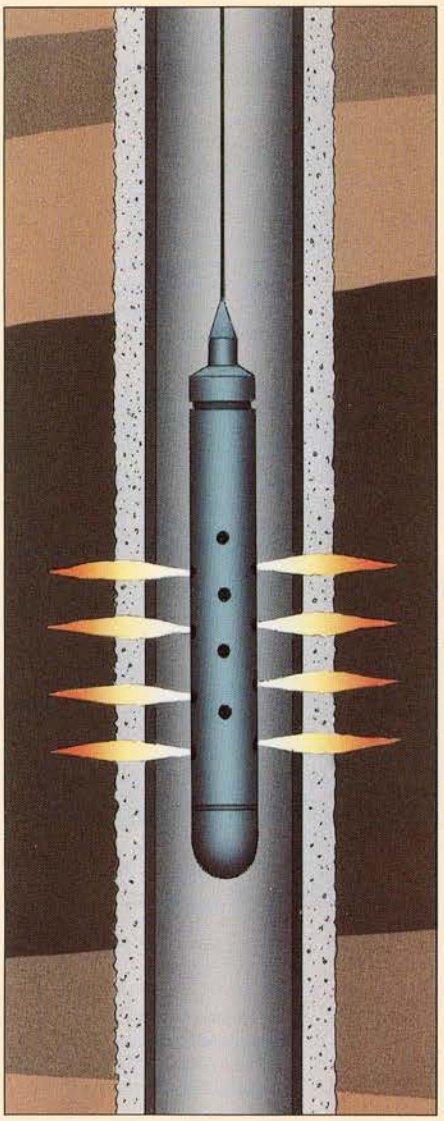
The casing must be opened to the reservoir so that oil and gas can flow into the well. This is accomplished with a cylindrical "gun" which holds explosive shaped charges that perforate the casing and cement at the depth of the oil reservoir.

After the well is completed and made ready for production, wireline logs can be recorded, while the well is flowing, to verify that the completion has gone as planned; these production logging measurements describe: how much each perforated zone contributes to total production; the density of the fluids, thus detecting hydrocarbon and water entry zones; and pressure and temperature of the flowing fluids.

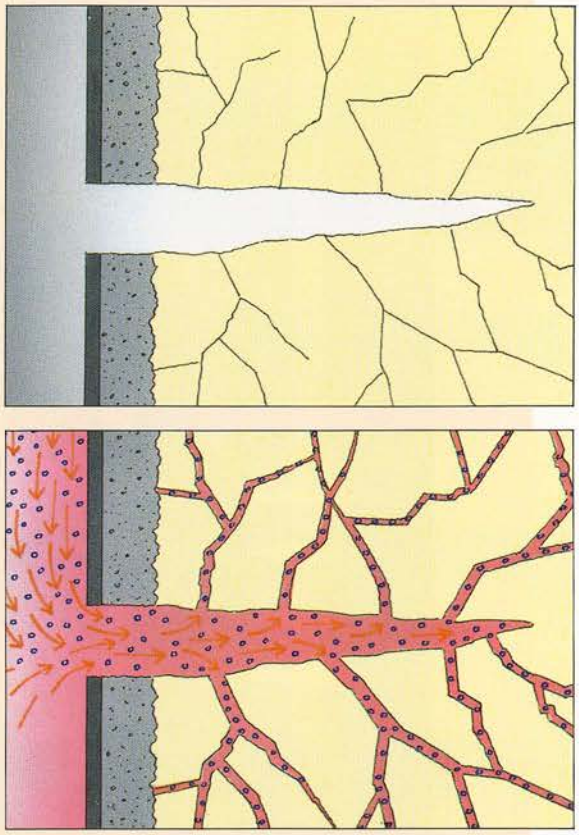
In addition, hydrocarbon saturation logs, recorded through casing right after the well is completed, serve as a reference; identical logs, made periodically during the life of the well, can be compared to these base logs to diagnose production problems.



A dual cementing unit on an offshore production platform stands ready to cement the many production wells that two independent rigs are drilling into the reservoir from this platform. Each separate skid-mounted cementing unit contains two 340 horsepower diesel engines (behind the two mixing tanks in the foreground) which power the cement mixing systems and pump the slurry down the well. Bulk cement is stored in tanks (grey, seen on the left) and liquid additives are in tanks above the cementing units.



To initiate production, a cylindrical perforating gun, holding explosive charges, is positioned in the casing at reservoir depth, on the end of a wireline. Each shaped charge consists of a dense, conical metal liner surrounded by a few ounces of high explosive. When the charges are fired, the liner collapses into a focused metallic jet that blasts through the casing and cement, deep into the reservoir rock. In the few microseconds that it takes, 500,000 times normal atmospheric pressure is generated by the blast and the jet reaches Mach 20 velocity.



The reservoir rock (top) may contain abundant oil but not produce effectively because of few or restricted flow channels.

To stimulate production, a fluid is pumped through the perforations with enough pressure to fracture the reservoir rocks, opening flow channels. Sand or synthetic beads of a hard substance are mixed into the frac fluid to pack into the fractures, holding them open after the pressure is released.

STIMULATING PRODUCTION

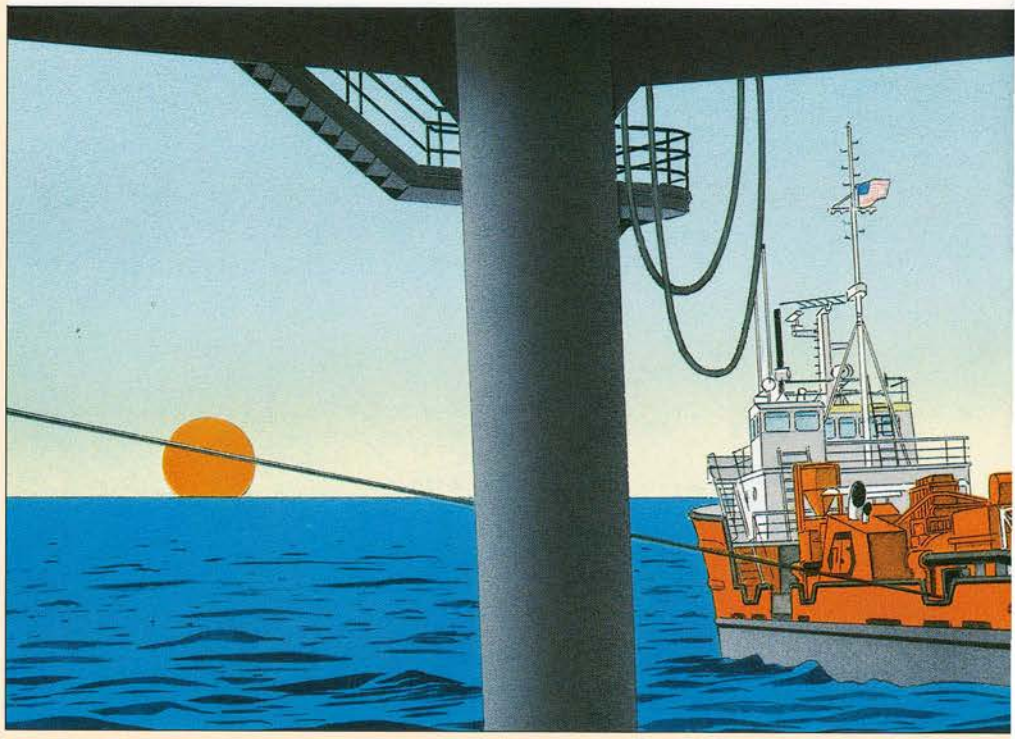
The well is completed and production starts. But only a trickle of oil flows, even though there is strong evidence that plenty of oil is there. What to do?

Sometimes the reservoir rock has too few or too small flow channels between pores containing the oil. When this happens, the reservoir rock must be stimulated to increase its permeability, or its ability to pass fluids, by opening more and wider channels.

There are two kinds of stimulation treatments: dissolving portions of the reservoir rock with acid, called acidizing; and breaking the rock with fluid under immense pressure, called fracturing.

To acidize a reservoir, large quantities of hydrochloric or similar acids are pumped into the reservoir where they dissolve impurities, such as clay particles, or part of the rock.

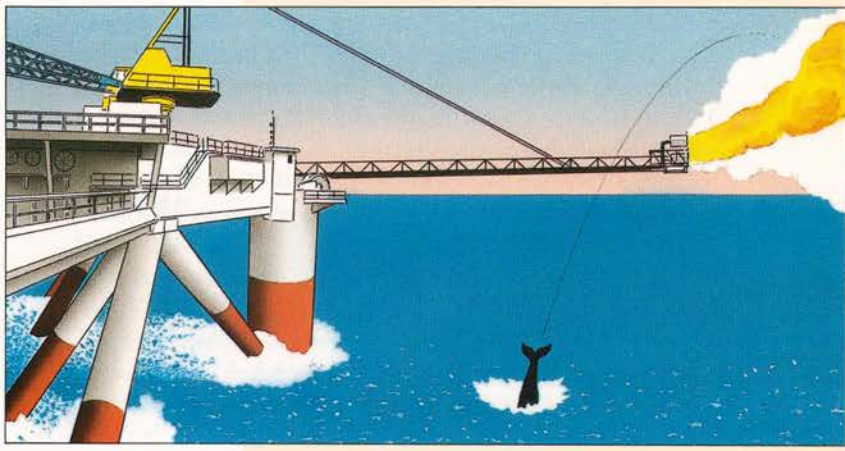
Fracturing uses heavy-duty pumping equipment capable of producing high rates and pressures. Specially

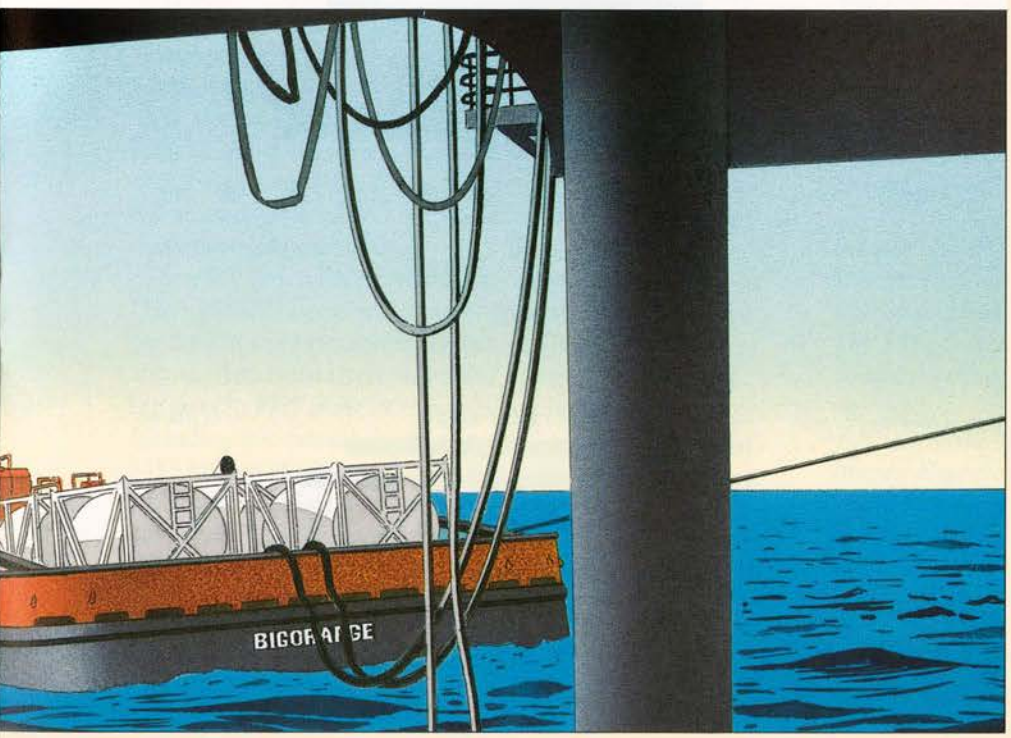


blended fluids are pumped down the well and into the reservoir. Pumping continues until pressure buildup literally cracks the reservoir rocks, creating fractures which may extend as far as hundreds or thousands of feet from the well. These fractures provide paths for oil or gas to flow to the well bore. Sand or synthetic pellets are mixed into the fracturing fluid and are carried into the fractures. When pressure is released, the fractures are kept from closing by these particles which prop open the cracks. Some large jobs require millions of pounds of such "proppant".

Stimulation treatments are designed with data gathered from rock sample analysis, wireline logs and production tests. Computers and recorders monitor the stimulation job providing the engineers with a picture of the treatment in process, allowing them to control pumping parameters to meet the job design.

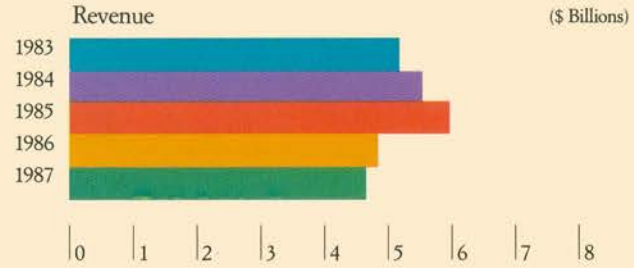
Production tests consist of flowing a reservoir during a limited time period to verify its production capacity. Such tests can be performed before and after a stimulation treatment to help design and evaluate stimulation programs. Offshore, the produced hydrocarbons are burned to avoid sea pollution.

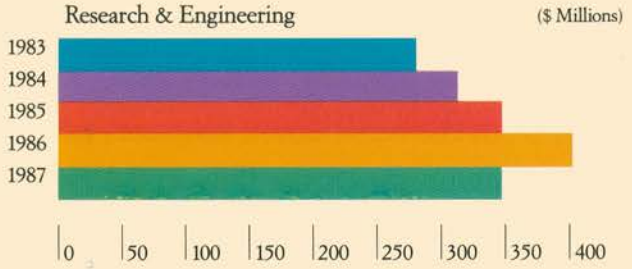


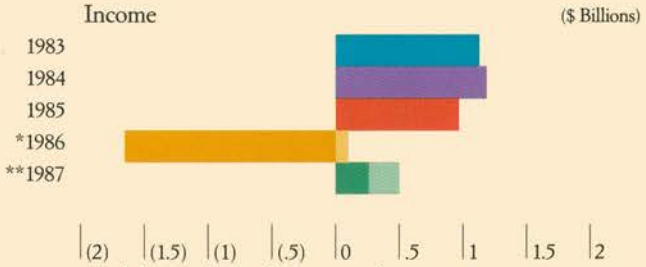


Dowell Schlumberger Big-Orange pumping services vessels perform cementing and stimulation jobs offshore. These boats can pump 80 barrels of liquid or slurries per minute at pressures up to 15,000 pounds per square inch, under computer control. The vessel carries all the bulk supplies, acid, sand, and cement, needed for typical jobs.

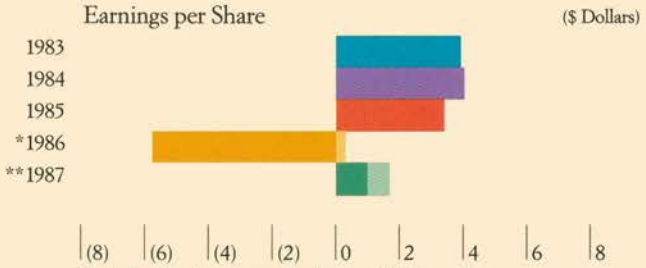
ALL CHARTS REFER TO CONTINUING OPERATIONS



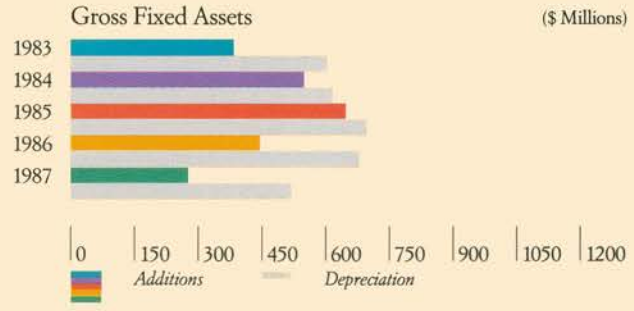


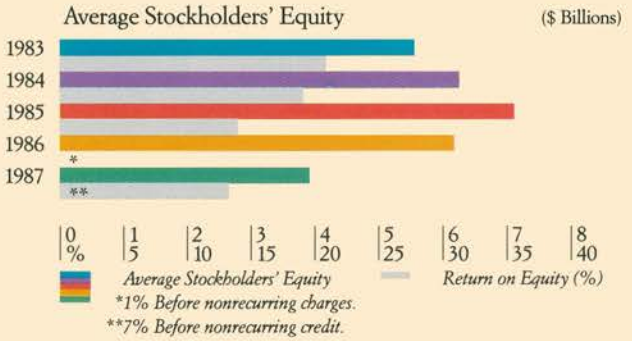


*Includes $1.74 billion of nonrecurring charges.
**Includes $222 million nonrecurring credit.



*Includes after tax nonrecurring charges of $6.05 per share.
**Includes after tax nonrecurring credit of $0.80 per share.





*1% Before nonrecurring charges.
**7% Before nonrecurring credit.

Results of Operations

Effective September 30, 1987 the Company sold its Fairchild Semiconductor operations to National Semiconductor Corporation. Accordingly, comments in this Financial Review exclude amounts relating to Fairchild Semiconductor which has been presented as a discontinued operation.

Income from continuing operations for 1987 was $503 million ($1.81 per share) as compared to a loss of $1.65 billion ($5.76 per share) in 1986 and income of $978 million ($3.27 per share) in 1985. Income from continuing operations in 1987 includes an unusual $69 million after tax gain ($0.25 per share) on the sale of the Company's investment in Compagnie Luxembourgeoise de Télédiffusion and a nonrecurring credit of $222 million ($0.80 per share) resulting from the settlement of litigation with the U.S. Government concerning whether Wireline oilfield operations on the outer continental shelf area during the years 1970 through 1986 were subject to U.S. taxation. The 1986 loss from continuing operations included nonrecurring charges of $1.74 billion, or $6.05 per share. Oilfield Services charges amounted to $1.46 billion and included $555 million for the write-off of goodwill at Dowell Schlumberger ($182 million) and Sedco Forex ($373 million). Measurement & Systems charges were $130 million.

Including the results of discontinued operations, 1987 income before extraordinary item was $283 million ($1.02 per share) compared to a loss of $2.02 billion ($7.02 per share) in 1986 and income of $351 million ($1.17 per share) in 1985. The 1987 loss from discontinued operations was $220 million ($0.79 per share), representing the loss on the sale of Fairchild Semiconductor to National Semiconductor Corporation. The 1986 loss from discontinued operations was $363 million, or $1.26 per share, and included provisions for estimated loss on disposal ($200 million) and operating losses during the phase-out period ($70 million). In 1985, the loss from discontinued operations was $627 million ($2.10 per share) and included unusual charges at Fairchild Semiconductor of $486 million ($1.63 per share) for the write-off of goodwill ($250 million) and the consolidation of production facilities.

In 1987, Sedco Forex received an award from the Iran-U.S. Claims Tribunal which, after taxes and other expenses, resulted in a net extraordinary gain of $70 million. This award arose from Iran's seizure of a SEDCO, Inc. drilling business in 1979 prior to its acquisition by the Company. Including this extraordinary gain, 1987 net income was $353 million ($1.27 per share) compared to a net loss of $2.02 billion ($7.02 per share) in 1986 and net income of $351 million ($1.17 per share) in 1985.

Oilfield Services

Oilfield Services operating revenue, on a comparable basis, decreased 15%, 33% and 2% in 1987, 1986 and 1985, respectively.

Wireline, Seismic & Testing Services revenue declined 16% in 1987 (on a comparable basis, including GECO in both years), 34% in 1986 and 3% in 1985. Wireline & Testing Services was 17% lower; revenue declined 4% in North America and 21% in the Eastern Hemisphere and Latin America reflecting lower average active rigs and price discounting although the North American market improved significantly in the second half of the year. Seismic Services (GECO – 50% owned) increased 17% resulting from a general upward trend in the utilization rate of the offshore seismic industry in the second half of 1987.

Drilling & Pumping Services revenue declined 18% in 1987 and 32% in 1986. Excluding the effect of the acquisition of SEDCO, revenue declined 3% in 1985. Sedco Forex revenue declined 27% in 1987 as contracts at favorable rates had to be renewed at prevailing lower rates. Pumping Services (Dowell Schlumberger – 50% owned) revenue declined 8%; activity and pricing improved in North America (revenue up 11%) but remained weak outside North America (revenue down 18%). Anadrill revenue was 11% below 1986 despite improvement in the second half of the year, mainly in North America.

Measurement & Systems

Measurement & Systems operating revenue increased 7% in 1987, 18% in 1986 and was flat in 1985.

Schlumberger Industries revenue, on a comparable basis, increased 13% in 1987, 23% in 1986 and 2% in 1985. Expressed in national currencies, and on a comparable basis, revenue increased 4% in 1987 reflecting higher demand for electricity meters outside North America and for communications, smart card and automated gasoline dispensing systems.

Revenue at Schlumberger Technologies was flat in 1987 and 1986 after a 5% decline in 1985. At Automatic Test Equipment, revenue was essentially unchanged from 1986, although the North American market strengthened in the second half of 1987. CAD/CAM revenue was down 17% due to severe competition in the North American market. Graphics revenue increased 20% resulting from continued strength in the European market.

Interest Income

Interest income was $235 million in 1987 compared to $356 million and $443 million in 1986 and 1985, respectively. The 34% decrease in 1987 compared to 1986 was due to the combined effect of lower short-term investments and average yield.

Interest Expense

Interest expense was $166 million in 1987 compared to $410 million in 1986 and $209 million in 1985. The substantial decrease in 1987 compared to 1986 was primarily due to lower indebtedness and the 1986 provision of $228 million for potential interest related to the Company's litigation with the U.S. Government with respect to income from continuing Wireline operations on the outer continental shelf of the United States. This litigation was settled in 1987.

Research & Engineering

Research & engineering expenditures were $352 million, $58 million below 1986 and level with 1985. Oilfield Services expenditures for research & engineering totaled $184 million, $244 million and $208 million in 1987, 1986 and 1985, respectively. Measurement & Systems spent $168 million, $166 million and $143 million for the same years.

Acquisitions

On June 29, 1987, the Company acquired Neptune International at a cost of $136 million. The acquisition was accounted for as a purchase and the accounts of Neptune have been consolidated with those of the Company since July 1, 1987.

In November 1986, the Company acquired 50% of GECO A.S. at a cost of $77 million. The acquisition was accounted for as a purchase and the related investment is included in investments in affiliated companies. In February 1988, the Company acquired an additional 25% ownership interest at a cost of $100 million through the subscription of newly issued GECO common stock. As a result, GECO will be treated as a consolidated subsidiary in 1988.

Fixed Assets

Expenditures for fixed assets in 1987 were $276 million compared to $447 million in 1986.

Additions by business sector were as follows:

	(Stated in millions)	
	1987	1986
Oilfield Services		
Wireline, Seismic & Testing Services	**$122**	$249
Drilling & Pumping Services	**50**	70
	172	319
Measurement & Systems		
Schlumberger Industries	**74**	71
Schlumberger Technologies	**30**	56
	104	127
Other	**—**	1
	$276	$447

Common Stock, Market Prices and Dividends Declared per Share

Quarterly high and low prices for the Company's Common Stock as reported by the New York Stock Exchange (composite transactions), together with dividends declared per share in each quarter of 1987 and 1986 were:

	Price Range		Dividends
	High	Low	Declared
1987			
Quarters			
First	$41½	$32	$0.30
Second	47	39⅜	0.30
Third	51	42¾	0.30
Fourth	48¼	26	0.30
1986			
Quarters			
First	$37¾	$29	$0.30
Second	34⅞	29⅝	0.30
Third	35½	27¼	0.30
Fourth	35⅝	31⅛	0.30

The number of holders of record of the Common Stock of the Company at December 21, 1987 was approximately 42,000. There are no legal restrictions on the payment of dividends or ownership or voting of such shares. United States stockholders are not subject to any Netherlands Antilles withholding or other Netherlands Antilles taxes attributable to ownership of such shares.

Financial Position

At year end, working capital was $1.76 billion, $358 million below the prior year; the current ratio was 1.66 to 1.

Liquidity, which represents cash and short-term investments less debt, was $1.76 billion and $2.26 billion at December 31, 1987 and 1986, respectively.

CONSOLIDATED STATEMENT OF OPERATIONS

(Stated in thousands)

Year Ended December 31,	**1987**	1986*	1985*
Revenue			
Operating	**$4,401,993**	$ 4,568,395	$5,585,060
Interest and other income	**325,026**	370,025	433,842
	4,727,019	4,938,420	6,018,902
Expenses			
Cost of goods sold and services	**3,272,901**	3,506,426	3,649,567
Research & engineering	**351,831**	409,516	351,464
Marketing	**282,682**	260,582	226,672
General	**257,613**	299,296	279,894
Interest	**165,654**	410,001	209,238
Nonrecurring items	**(222,200)**	1,601,314	—
Taxes on income	**115,978**	105,855	324,417
	4,224,459	6,592,990	5,041,252
Income (Loss) from Continuing Operations	**502,560**	(1,654,570)	977,650
Loss from Discontinued Operations of Fairchild Semiconductor	**(220,000)**	(363,021)	(626,614)
Income (Loss) before Extraordinary Item	**282,560**	(2,017,591)	351,036
Extraordinary Item, less taxes and other expenses of $46 million	**70,080**	—	—
Net Income (Loss)	**$ 352,640**	$(2,017,591)	$ 351,036
Income (loss) per share			
Continuing operations	**$ 1.81**	$ (5.76)	$ 3.27
Discontinued operations	**(0.79)**	(1.26)	(2.10)
Before extraordinary item	**1.02**	(7.02)	1.17
Extraordinary item	**0.25**	—	—
Net income (loss)	**$ 1.27**	$ (7.02)	$ 1.17
Average shares outstanding (thousands)	**277,065**	287,387	298,872

*Reclassified, in part, for comparative purposes.

See Notes to Consolidated Financial Statements
Schlumberger Limited (Schlumberger N.V., Incorporated in the Netherlands Antilles) and Subsidiary Companies

CONSOLIDATED BALANCE SHEET — ASSETS *(Stated in thousands)*

December 31,	**1987**	1986
Current Assets		
Cash	**$ 57,073**	$ 45,247
Short-term investments	**2,511,506**	3,765,128
Receivables less allowance for doubtful accounts (1987 — $68,468; 1986 — $55,663)	**1,099,140**	974,681
Income tax refund	**103,800**	—
Inventories	**575,941**	560,032
Other current assets	**70,841**	66,909
	4,418,301	5,411,997
Investments in Affiliated Companies	**252,258**	310,639
Long-Term Investments and Receivables	**112,796**	124,965
Net Assets of Fairchild Semiconductor at Estimated Realizable Value	**—**	150,000
Fixed Assets less accumulated depreciation	**1,670,354**	1,832,460
Excess of Investment Over Net Assets of Companies Purchased less amortization	**231,143**	118,000
Other Assets	**56,116**	63,718
	$6,740,968	$8,011,779

See Notes to Consolidated Financial Statements
Schlumberger Limited (Schlumberger N.V., Incorporated in the Netherlands Antilles) and Subsidiary Companies

CONSOLIDATED BALANCE SHEET — LIABILITIES AND STOCKHOLDERS' EQUITY *(Stated in thousands)*

December 31,	**1987**	1986
Current Liabilities		
Accounts payable and accrued liabilities	**$1,233,922**	$1,338,758
Estimated liability for taxes on income	**657,263**	826,894
Bank loans	**658,396**	1,034,615
Dividend payable	**82,032**	84,787
Long-term debt due within one year	**25,514**	8,155
	2,657,127	3,293,209
Long-Term Debt	**125,283**	504,334
Other Liabilities	**122,674**	90,965
	2,905,084	3,888,508
Stockholders' Equity		
Common stock	**423,816**	421,113
Income retained for use in the business	**4,560,168**	4,539,421
Treasury stock at cost	**(1,146,520)**	(784,768)
Translation adjustment	**(1,580)**	(52,495)
	3,835,884	4,123,271
	$6,740,968	$8,011,779

See Notes to Consolidated Financial Statements
Schlumberger Limited (Schlumberger N.V., Incorporated in the Netherlands Antilles) and Subsidiary Companies

CONSOLIDATED STATEMENT OF CHANGES IN FINANCIAL POSITION

(Stated in thousands)

Year Ended December 31,	**1987**	1986	1985
Funds provided by continuing operations:			
Income (loss) from continuing operations	**$ 502,560**	$(1,654,570)	$ 977,650
Depreciation and amortization	**534,530**	719,033	729,457
Excess of dividends over results of companies carried at equity (Dividends: 1987 – $10,063; 1986 – $38,916; 1985 – $88,715)	**73,542**	108,708	30,719
Net change in other working capital accounts	**(303,794)**	486,527	102,994
Gain from sale of investments	**(69,122)**	(60,245)	—
Nonrecurring items	**(222,200)**	1,298,322	—
Other – net	**(31,381)**	(61,337)	(141,373)
Funds provided by continuing operations	**484,135**	836,438	1,699,447
Funds required by discontinued operations	**(179,928)***	(3,387)	(62,072)
Funds provided by continuing and discontinued operations	**304,207**	833,051	1,637,375
Funds provided by extraordinary item, before taxes and other expenses	**115,635**	—	—
Retirement and sales of fixed assets	**111,100**	167,010	38,321
Proceeds from sale of shares to optionees	**4,567**	126	287
Proceeds from sale of investments, less related income taxes	**77,282**	98,940	—
Total funds provided	**612,791**	1,099,127	1,675,983
Funds required for:			
Additions to fixed assets	**276,373**	447,248	650,367
Dividends declared	**331,893**	343,882	358,388
Purchase of shares for Treasury	**363,616**	474,439	183,740
Discontinued operations – primarily additions to fixed assets	**—**	138,331	136,922
Other – net	**13,654**	(10,210)	17,933
Total funds required	**985,536**	1,393,690	1,347,350
Resulting in a (decrease) increase in cash and short-term investments before acquisition and financing activities	**(372,745)**	(294,563)	328,633
Acquisition and financing activities:			
Net assets of Neptune International excluding cash and indebtedness	**(131,140)**	—	—
Purchase of 50% of GECO A.S.	**—**	(76,950)	—
Debt transactions (including bank loans):			
Debt incurred to acquire Neptune International	**127,273**	—	—
Reassumption of Fairchild Semiconductor debt	**220,331**	—	—
Other (decrease) increase in indebtedness	**(1,085,515)**	(391,906)**	256,023
Net acquisition and financing activities	**(869,051)**	(468,856)	256,023
Resulting in a (decrease) increase in cash and short-term investments	**(1,241,796)**	(763,419)	584,656
Cash and short-term investments – Beginning of period	**3,810,375**	4,573,794**	4,005,468
Cash and short-term investments – End of period	**2,568,579**	3,810,375	4,590,124
Less: All indebtedness	**809,193**	1,547,104	2,079,042
Liquidity	**$1,759,386**	$ 2,263,271	$2,511,082

*Includes reassumption of debt ($220 million), cash operating expenses ($82 million), less proceeds of sale ($122 million).
**Excludes amounts relating to discontinued operations.

See Notes to Consolidated Financial Statements
Schlumberger Limited (Schlumberger N.V., Incorporated in the Netherlands Antilles) and Subsidiary Companies

CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY

(Dollar amounts in thousands)

	Common Stock					
	Issued		*In Treasury*		*Translation Adjustment*	*Income Retained for Use in the Business*
	Shares	*Amount*	*Shares*	*Amount*		
Balance, January 1, 1985	303,370,781	$421,583	2,669,016	$ 127,472	$(210,155)	$6,908,246
Translation adjustment, 1985					75,812	
Purchases for Treasury			4,747,300	183,740		
Sales to optionees less shares exchanged	6,076	(397)	(13,591)	(684)		
Net income						351,036
Dividends declared ($1.20 per share)						(358,388)
Balance, December 31, 1985	303,376,857	421,186	7,402,725	310,528	(134,343)	6,900,894
Translation adjustment, 1986					81,848	
Purchases for Treasury			14,821,980	474,439		
Sales to optionees less shares exchanged	2,705	(73)	(3,972)	(199)		
Net loss						(2,017,591)
Dividends declared ($1.20 per share)						(343,882)
Balance, December 31, 1986	303,379,562	421,113	22,220,733	784,768	(52,495)	4,539,421
Translation adjustment, 1987					50,915	
Purchases for Treasury			9,079,720	363,616		
Sales to optionees less shares exchanged	94,118	2,703	(37,106)	(1,864)		
Net income						352,640
Dividends declared ($1.20 per share)						(331,893)
Balance, December 31, 1987	303,473,680	$423,816	31,263,347	$1,146,520	$ (1,580)	$4,560,168

See Notes to Consolidated Financial Statements
Schlumberger Limited (Schlumberger N.V., Incorporated in the Netherlands Antilles) and Subsidiary Companies

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Summary of Accounting Policies

The Consolidated Financial Statements of Schlumberger Limited and its subsidiaries have been prepared in accordance with accounting principles generally accepted in the United States.

Principles of Consolidation

The Consolidated Financial Statements include the accounts of majority-owned subsidiaries. Significant 20%–50% owned companies are carried in investments in affiliated companies on the equity method. The pro rata share of revenue and expenses of 50% owned companies is included in the individual captions in the Consolidated Statement of Operations. The Company's pro rata share of after tax earnings of other equity companies is included in interest and other income.

Translation of Non-U.S. Currencies

All assets and liabilities recorded in functional currencies other than U.S. dollars are translated at current exchange rates. The resulting adjustments are charged or credited directly to the Stockholders' Equity section of the Balance Sheet. Stockholders' Equity was increased $51 million, $82 million and $76 million in 1987, 1986 and 1985, respectively. Revenue and expenses are translated at the weighted average exchange rates for the period.

All transaction gains and losses are included in income in the period in which they occur. Transaction losses included in the 1987 results amounted to $4 million compared to gains of $39 million in 1986 and losses of $24 million in 1985.

Short-Term Investments

Short-term investments are stated at cost plus accrued interest, which approximates market, and comprised mainly certificates of deposit and time deposits in U.S. dollars.

Inventories

Inventories are stated principally at average or standard cost, which approximates average cost, or at market, if lower.

Excess of Investment Over Net Assets of Companies Purchased

Costs in excess of net assets of purchased companies are amortized on a straight-line basis over the estimated life, but not in excess of 40 years. Accumulated amortization was $37 million and $29 million at December 31, 1987 and 1986, respectively.

Fixed Assets and Depreciation

Fixed assets are stated at cost less accumulated depreciation, which is provided for by charges to income over the estimated useful lives of the assets by the straight-line method. Fixed assets include the cost of oilfield technical equipment manufactured by subsidiaries of the Company. Expenditures for renewals, replacements and betterments are capitalized. Maintenance and repairs are charged to operating expenses as incurred. Upon sale or other disposition, the applicable amounts of asset cost and accumulated depreciation are removed from the accounts and the net amount, less proceeds from disposal, is charged or credited to income.

Taxes on Income

The Company and its subsidiaries compute taxes on income in accordance with the tax rules and regulations of the many taxing authorities where the income is earned. The income tax rates imposed by these taxing authorities vary substantially. Taxable income may differ from pretax income for financial accounting purposes. To the extent that differences are due to revenue or expense items reported in one period for tax purposes and in another period for financial accounting purposes, an appropriate provision for deferred income taxes is made. The provisions were not significant in 1987, 1986 or 1985.

Approximately $2.2 billion of consolidated income retained for use in the business at December 31, 1987 represented undistributed earnings of consolidated subsidiaries and the Company's pro rata share of 20%–50% owned companies. No provision is made for deferred income taxes on those earnings considered to be indefinitely reinvested or earnings which would not be taxed when remitted.

Tax credits and other allowances are credited to current income tax expense on the flow-through method of accounting.

In December 1987, Financial Accounting Standard No. 96 – Accounting for Income Taxes was issued by the Financial Accounting Standards Board. As permitted by FAS No. 96, the Company will implement this Standard on January 1, 1989 and, accordingly, the effect of adoption is not determinable at this time.

Net Income per Share

Net income per share is computed by dividing net income by the average number of common shares outstanding during the year.

Research & Engineering

All research & engineering expenditures are expensed as incurred, including costs relating to patents or rights which may result from such expenditures.

Discontinued Operations

On October 23, 1986, the Company announced an agreement in principle to sell 82% of its Fairchild Semiconductor operations to Fujitsu Limited. Following the termination of this agreement in March of 1987, the Fairchild Semiconductor operations were sold effective September 30, 1987 to National Semiconductor Corporation in exchange for National Semiconductor common stock and warrants with a guaranteed minimum cash value of $122 million, which is included in short-term investments.

The results of the Fairchild Semiconductor business, including losses on disposal, have been reported as discontinued operations in the Consolidated Statement of Opera-

tions. The 1987 loss of $220 million represents the loss on the sale to National Semiconductor. In 1986, as a result of the pending sale to Fujitsu Limited, provisions for the estimated loss on disposal of $200 million and operating losses during the phase-out period of $70 million were recorded as part of the aggregate discontinued operations loss.

Operating results of Fairchild Semiconductor were as follows:

	(Stated in thousands)	
	1986	1985
Operating revenue	$ 487,788	$ 506,481
Loss before income taxes	$ (91,241)	$(685,099)
Loss after income taxes	$ (93,021)	$(626,614)

The 1986 loss from discontinued operations included a $53 million gain from the favorable settlement of the Data General litigation.

The 1985 loss included unusual charges of $486 million ($1.63 per share) for the write-off of goodwill ($250 million), a provision of $86 million for disposal of certain assets and $102 million for the consolidation of certain production facilities.

Nonrecurring Items

On December 23, 1987 the Company announced that it reached a settlement with the U.S. Government concerning whether Wireline oilfield operations on the outer continental shelf area during the years 1970 through 1986 were subject to U.S. taxation. As a result of the settlement, the Company recorded a fourth quarter after tax credit to income of $222 million ($0.80 per share). After 1986, the Company's income from Wireline oilfield operations on the outer continental shelf area is subject to U.S. tax.

In the fourth quarter of 1986, the Company recorded nonrecurring charges with an after tax effect of $1.74 billion ($6.05 per share). These charges related to the Oilfield Services segment in the amount of $1.46 billion, and to the Measurement & Systems segment in the amount of $130 million; $150 million of the balance represented potential interest related to the Company's litigation with the U.S. Government which was settled in 1987 as described above. The Oilfield Services charges consisted primarily of write-offs of goodwill at Dowell Schlumberger ($182 million), the 50% owned pumping services subsidiary, and at Sedco Forex ($373 million), the drilling services operation, and write-offs and write-downs of certain equipment and inventories aggregating $730 million. The Measurement & Systems charges consisted mainly of provisions for consolidation of operations in both the Schlumberger Industries and Schlumberger Technologies groups.

The pretax effect of the 1986 charges was $1.83 billion. The potential interest related to the Company's litigation with the U.S. Government ($228 million pretax) was classified as interest expense; tax benefits related to the 1986 charges were included in taxes on income.

Extraordinary Item

In July 1987, Sedco Forex, the Company's drilling services operation, received an award from the Iran-U.S. Claims Tribunal of $116 million. This award arose from Iran's seizure of a SEDCO, Inc. drilling business in 1979 prior to its acquisition by the Company. After taxes and other expenses of $46 million, the award resulted in a net gain of $70 million.

Acquisitions

On June 29, 1987, the Company announced the acquisition of Neptune International, a producer of water meters and flow measurement equipment, at a cost of $136 million. The acquisition was accounted for as a purchase and the accounts of Neptune have been consolidated with those of the Company effective July 1, 1987. Cost in excess of net assets acquired was $117 million which is being amortized on a straight-line basis over 25 years.

In November 1986, the Company acquired, primarily through the subscription of common stock, 50% of GECO A.S. at a cost of $77 million. GECO provides offshore geophysical services, chiefly in the North Sea and the United States. The acquisition was accounted for as a purchase and the related investment is included in investments in affiliated companies. The pro rata share of GECO's results, from the date of acquisition, is included in the Consolidated Statement of Operations. In February 1988, the Company acquired an additional 25% ownership interest at a cost of $100 million through the subscription of newly issued GECO common stock. As a result, GECO will be treated as a consolidated subsidiary in 1988.

Fixed Assets

A summary of fixed assets follows:

	(Stated in millions)	
December 31,	**1987**	1986
Land	**$ 62**	$ 59
Buildings & improvements	**668**	607
Machinery and equipment	**4,447**	4,517
Total cost	**5,177**	5,183
Less accumulated depreciation	**3,507**	3,351
	$1,670	$1,832

In 1986, certain oilfield services fixed assets were written down as a result of the significant business downturn in the oil industry.

Estimated useful lives of buildings & improvements range from 8 to 50 years and of machinery and equipment from 2 to 15 years.

Investments in Affiliated Companies

Investments in affiliated companies at December 31, 1987 comprised mainly the Company's 50% investments in the worldwide Dowell Schlumberger business ($181 million), GECO and 50% owned companies acquired through the acquisition of SEDCO.

Combined financial data for all 50% owned affiliated companies are as follows:

December 31,	(Stated in millions) 1987	1986
Current assets	**$ 688**	$ 677
Fixed assets	**783**	905
Other assets	**20**	57
	$1,491	$1,639
Liabilities	**$ 876**	$ 837
Equity	**615**	802
	$1,491	$1,639

Equity in undistributed earnings of all 50% owned companies at December 31, 1987 and 1986, amounted to $71 million and $111 million, respectively.

Long-Term Debt

Long-term debt consisted of the following:

December 31,	(Stated in millions) 1987	1986
Bank loan due 1990, interest at money market based rates	**$ —**	$ 325
Other bank loans	**125**	179
	$ 125	$ 504

Other bank loans are at money market based rates varying up to 9.5% and are primarily denominated in U.S. dollars, U.K. sterling and Japanese yen.

Long-term debt at December 31, 1987 is payable principally in U.S. dollars and is due $19 million in 1989, $34 million in 1990, $52 million in 1991, $11 million in 1992 and $9 million thereafter.

Lines of Credit

The Company's principal U.S. subsidiary has an available unused Revolving Credit Agreement with a group of banks. The Agreement provides that the subsidiary may borrow up to $1.2 billion until December 31, 1989 at money market based rates. In addition, at December 31, 1987, the Company and its subsidiaries had available unused short-term lines of credit of $336 million.

Capital Stock

The Company is authorized to issue 500,000,000 shares of Common Stock, par value $0.01 per share, of which 272,210,333 and 281,158,829 shares were outstanding on December 31, 1987 and 1986, respectively. The Company is also authorized to issue 200,000,000 shares of cumulative Preferred Stock, par value $0.01 per share, which may be issued in series with terms and conditions determined by the Board of Directors. No shares of Preferred Stock have been issued. Holders of Common Stock and Preferred Stock are entitled to one vote for each share of stock held.

In December 1985, the Board of Directors authorized a stock repurchase program under which the Company purchased 25 million shares of Common Stock through December 31, 1987. In December 1987, the Board of Directors authorized a new stock repurchase program which allows the Company to purchase up to 20 million shares of Common Stock, depending on market conditions. The purchases may be made from time to time, beginning in 1988.

In January 1988, the Board of Directors approved a noncompensatory Employee Discounted Stock Purchase Plan. Under the Plan, employees may purchase Common Stock at the end of the Plan year through payroll deductions of up to 10% of compensation. The price per share is equal to 85% of the lower of the beginning or end of Plan year market price. The aggregate number of shares which may be purchased cannot exceed 3,000,000 shares. The Plan is subject to shareholder approval.

Options to officers and key employees to purchase shares of the Company's Common Stock were granted at prices equal to 100% of fair market value at date of grant.

Transactions under stock option plans were as follows:

	Number Of Shares	Option Price Per Share
Outstanding Jan. 1, 1986	4,064,908	$ 4.76–74.72
Granted	2,327,150	$29.88–36.06
Exercised	(5,403)	$ 7.19–19.08
Lapsed or terminated	(573,144)	$30.88–69.42
Outstanding Dec. 31, 1986	5,813,511	$ 4.76–74.72
Granted	760,250	$29.25–49.31
Exercised	(164,070)	$ 8.50–46.56
Lapsed or terminated	(652,438)	$17.51–69.42
Outstanding Dec. 31, 1987	5,757,253	$ 4.76–74.72
Exercisable at Dec. 31, 1987	2,598,312	$ 4.76–74.72
Available for grant		
Dec. 31, 1986	7,683,985	
Dec. 31, 1987	7,575,077	

Income Tax Expense

The Company and its subsidiaries operate in over 100 taxing jurisdictions with statutory rates ranging up to about 50%.

The Company's U.S. subsidiary is in an operating loss carryforward position. At December 31, 1987 the subsidiary had unused operating loss carryforwards for consolidated financial statement purposes of $1.1 billion which expire in the years 2000–2002. The tax benefit of these carryforwards is available to reduce future U.S. federal income tax expense.

Leases and Lease Commitments

Total rental expense was $126 million in 1987, $148 million in 1986 and $150 million in 1985. Future minimum rental commitments under noncancelable leases for years ending December 31 are: 1988 — $65 million; 1989 — $46 million; 1990 — $32 million; 1991 — $20 million; and 1992 — $15 million. For the ensuing three five-year periods, these com-

mitments decrease from $34 million to $9 million. The minimum rentals over the remaining terms of the leases aggregate $18 million.

Pension Plans and Deferred Benefit Plans

Effective January 1, 1987, the Company adopted Financial Accounting Standard No. 87 – Employers' Accounting for Pensions. As permitted by this Standard, pension cost and related disclosures for non-U.S. defined benefit plans in 1987 and all defined benefit pension plans for 1986 and 1985 were determined under provisions of the previous accounting principle.

U.S. Pension Plans:

The Company and its U.S. subsidiary sponsor several defined benefit pension plans which cover substantially all employees. The benefits are based on years of service and compensation on a career-average or final pay basis. These plans are substantially fully funded with trustees in respect to past and current service. Charges to expense are based upon costs computed by independent actuaries. The funding policy is to contribute annually amounts that can be deducted for federal income tax purposes. These contributions are intended to provide for benefits earned to date and those expected to be earned in the future.

Net pension cost in the U.S. for 1987 included the following components:

	(Stated in millions)
Service cost – benefits earned during the period	$ 13
Interest cost on projected benefit obligation	30
Expected return on plan assets (actual return: $18)	(38)
Amortization of transition asset	(4)
Net pension cost	$ 1

The adoption of FAS 87 decreased 1987 pension cost by $4 million. Pension expense in 1985 was $21 million. In 1986, the actuarial assumptions for return on assets and rate of compensation increases were changed from 7% and 7% to 9% and 6%, respectively. As a result, 1986 pension expense was $30 million below that of 1985.

The funded status of the plans was as follows:

Dec. 31, 1987	*(Stated in millions)*
Actuarial present value of obligations:	
Vested benefit obligation	$353
Accumulated benefit obligation	$358
Projected benefit obligation	$414
Plan assets at market value	453
Excess of assets over projected benefit obligation	39
Unrecognized net gain	(2)
Unrecognized prior service cost	5
Unrecognized net asset at transition date	(46)
Pension liability	$ (4)

The assumed discount rate and rate of compensation increases used to determine the projected benefit obligation were 8.5% and 6%, respectively. The expected long-term rate of return on plan assets was 9%. Plan assets consist of common stocks ($221 million) and cash or cash equivalents ($190 million) and fixed interest investments ($42 million). Approximately 4% of the Plan assets at December 31, 1987 represent Schlumberger Limited Common Stock.

The actuarial present value of accumulated benefits at January 1, 1986 for U.S. defined benefit plans was $229 million, substantially all of which was vested. Net assets available for benefits at January 1, 1986 for such plans were $363 million. The assumed rate of return used in determining the actuarial present value of accumulated plan benefits was 9% in 1986.

Non U.S. Pension Plans:

Outside of the United States, subsidiaries of the Company sponsor several defined benefit and defined contribution plans which cover substantially all employees who are not covered by statutory plans. For defined benefit plans, charges to expense are based upon costs computed by independent actuaries. These plans are substantially fully funded with trustees in respect to past and current service. Pension expense was $12 million, $8 million, and $8 million in 1987, 1986 and 1985, respectively. For defined contribution plans, funding and cost are generally based upon a predetermined percentage of employee compensation. Charges to expense in 1987, 1986 and 1985 were $7 million, $9 million, and $8 million, respectively.

Other Deferred Benefits:

In addition to providing pension benefits, the Company and its subsidiaries have other deferred benefit programs. Expense for these programs was $39 million, $42 million and $69 million in 1987, 1986 and 1985, respectively.

In addition, the Company and its U.S. subsidiary provide certain health care benefits for certain active and retired employees. The cost of providing these benefits is recognized as expense when incurred and aggregated $39 million, $42 million and $37 million in 1987, 1986 and 1985, respectively. Outside of the United States, such benefits are mostly provided through government sponsored programs.

Segment Information

The Company's business comprises two segments: (1) Oilfield Services and (2) Measurement & Systems. Services and products are described in more detail on page 12 in this report.

Financial information for the years ended December 31, 1987, 1986 and 1985 by industry segment and by geographic area is as follows:

(Stated in millions)

Industry Segment 1987	*Oilfield Services*	*Measurement & Systems*	*Adjust. & Elim.*	*Consolidated*
Operating revenue				
Customers	$2,306	$2,096	$ —	$ 4,402
Intersegment transfers	—	9	(9)	—
	$2,306	$2,105	$ (9)	$ 4,402
Operating income	$ 147	$ 107	$ (2)	$ 252
Interest expense				(166)
Interest and other income less other charges — $14				311
Nonrecurring item				222
Income before taxes				$ 619
Depreciation expense	$ 421	$ 104	$ 2	$ 527
Fixed asset additions	$ 172	$ 104	$ —	$ 276
At December 31				
Identifiable assets	$2,133	$1,868	$ (19)	$ 3,982
Corporate assets				2,759
Total assets				$ 6,741
Industry Segment 1986				
Operating revenue				
Customers	$2,652	$1,916	$ —	$ 4,568
Intersegment transfers	—	44	(44)	—
	$2,652	$1,960	$ (44)	$ 4,568
Operating income (loss)	$ 8	$ 74	$(1,614)*	$(1,532)
Interest expense				(410)
Interest and other income less other charges — $(23)				393
Loss before taxes				$(1,549)
Depreciation expense	$ 593	$ 93	$ 2	$ 688
Fixed asset additions	$ 319	$ 127	$ 1	$ 447
At December 31				
Identifiable assets, continuing operations	$2,372	$1,593	$ (32)	$ 3,933
Identifiable assets, discontinued operations				150
Corporate assets				3,929
Total assets				$ 8,012
Industry Segment 1985				
Operating revenue				
Customers	$3,966	$1,619	$ —	$ 5,585
Intersegment transfers	—	43	(43)	—
	$3,966	$1,662	$ (43)	$ 5,585
Operating income	$1,039	$ 69	$ 1	$ 1,109
Interest expense				(209)
Interest and other income less other charges — $32				402
Income before taxes				$ 1,302
Depreciation expense	$ 627	$ 70	$ 3	$ 700
Fixed asset additions	$ 548	$ 99	$ 3	$ 650
At December 31				
Identifiable assets, continuing operations	$4,371	$1,460	$ (50)	$ 5,781
Identifiable assets, discontinued operations				737
Corporate assets				4,764
Total assets				$11,282

**Includes pretax nonrecurring charges of $1.60 billion.*

Transfers between segments and geographic areas are for the most part made at regular prices available to unaffiliated customers. Certain Oilfield Services segment fixed assets are manufactured within that segment and some are supplied by Measurement & Systems.

Corporate assets largely comprise short-term investments. During the years ended December 31, 1987, 1986 and 1985, neither sales to any government nor sales to any single customer exceeded 10% of consolidated operating revenue.

(Stated in millions)

	Western Hemisphere		*Eastern Hemisphere*				
Geographic Area 1987	*U.S.*	*Other*	*France*	*Other European*	*Other*	*Adjust. & Elim.*	*Consolidated*
Operating revenue							
Customers	$1,183	$549	$763	$ 964	$ 943	$ —	$ 4,402
Interarea transfers	150	32	169	21	5	(377)	—
	$1,333	$581	$932	$ 985	$ 948	$ (377)	$ 4,402
Operating income (loss)	$ (93)	$ 97	$ 58	$ 71	$ 147	$ (28)	$ 252
Interest expense							(166)
Interest and other income less other charges — $14							311
Nonrecurring item							222
Income before taxes							$ 619
At December 31							
Identifiable assets	$1,246	$393	$815	$ 808	$ 769	$ (49)	$ 3,982
Corporate assets							2,759
Total assets							$ 6,741
Geographic Area 1986							
Operating revenue							
Customers	$1,101	$584	$761	$ 932	$1,190	$ —	$ 4,568
Interarea transfers	247	3	174	56	5	(485)	—
	$1,348	$587	$935	$ 988	$1,195	$ (485)	$ 4,568
Operating income (loss)	$ (261)	$ 44	$ 15	$ 136	$ 168	$(1,634)*	$(1,532)
Interest expense							(410)
Interest and other income less other charges — $(23)							393
Loss before taxes							$(1,549)
At December 31							
Identifiable assets, continuing operations	$1,057	$433	$853	$ 743	$ 977	$ (130)	$ 3,933
Identifiable assets, discontinued operations							150
Corporate assets							3,929
Total assets							$ 8,012
Geographic Area 1985							
Operating revenue							
Customers	$1,614	$816	$595	$ 979	$1,581	$ —	$ 5,585
Interarea transfers	343	5	180	32	1	(561)	—
	$1,957	$821	$775	$1,011	$1,582	$ (561)	$ 5,585
Operating income	$ 62	$235	$ 68	$ 274	$ 511	$ (41)	$ 1,109
Interest expense							(209)
Interest and other income less other charges — $32							402
Income before taxes							$ 1,302
At December 31							
Identifiable assets, continuing operations	$2,193	$585	$873	$ 983	$1,381	$ (234)	$ 5,781
Identifiable assets, discontinued operations							737
Corporate assets							4,764
Total assets							$11,282

**Includes pretax nonrecurring charges of $1.60 billion.*

Contingencies

During 1980, a floating hotel, the Alexander Kielland, functioning as a dormitory for offshore work crews in the North Sea, capsized in a storm. The substructure of the floating hotel originally had been built as a drilling rig by an independent shipyard from a design licensed by a subsidiary of the Company. The Company's subsidiary was not involved in the ownership or operation of the drilling rig or in its conversion or use as a floating hotel. The accident has been investigated by a Commission appointed by the Norwegian Government, which has published its report. In October of 1981 and in February of 1982, the Company's subsidiary, the independent shipyard and one of its subcontractors were sued in France by Phillips Petroleum Company Norway and eight others operating as a group in the Ekofisk Field in the North Sea and by the Norwegian insurers of the Alexander Kielland seeking recovery for losses resulting from the accident of approximately $120 million (at December 31, 1987 currency exchange rates).

While the Company does not believe it, or its subsidiary, has liability in this matter, the litigation will involve complex international issues which could take several years to resolve and involve substantial legal and other costs. In the opinion of the Company, any liability that might ensue would not be material in relation to its financial position or results of operations.

The Company and its subsidiaries are party to various other legal proceedings, including environmental matters. Although the ultimate disposition of these proceedings is not presently determinable, in the opinion of the Company any liability that might ensue would not be material in relation to the consolidated financial position or results of operations of the Company.

Supplementary Information

Operating revenue and related cost of goods sold and services comprised the following:

		(Stated in millions)	
Year ended December 31,	**1987**	1986	1985
Operating revenue			
Sales	**$2,069**	$1,932	$1,783
Services	**2,333**	2,636	3,802
	$4,402	$4,568	$5,585
Direct operating costs			
Goods sold	**$1,334**	$1,308	$1,131
Services	**1,939**	2,198	2,519
	$3,273	$3,506	$3,650

Accounts payable and accrued liabilities are summarized as follows:

	(Stated in millions)	
December 31,	**1987**	1986
Payroll, vacation and employee benefits	**$ 230**	$ 258
Trade	**336**	281
Accrued interest	**32**	178
Other	**636**	622
	$1,234	$1,339

The caption "Interest and other income" includes interest income, principally from short-term investments, of $235 million, $356 million and $443 million for 1987, 1986 and 1985, respectively.

REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and Stockholders
of Schlumberger Limited:

In our opinion, the accompanying consolidated balance sheet and the related consolidated statements of operations, stockholders' equity and changes in financial position present fairly the financial position of Schlumberger Limited and its subsidiaries at December 31, 1987 and 1986, and the results of their operations and the changes in their financial position for each of the three years in the period ended December 31, 1987, in conformity with generally accepted accounting principles consistently applied. Our examinations of these statements 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.

Price Waterhouse

New York, New York
February 8, 1988

Quarterly Results (Unaudited)

The following table summarizes results for each of the four quarters for the years ended December 31, 1987 and 1986. Gross profit equals operating revenue less cost of goods sold and services. Earnings per share for the year does not equal the sum of the four quarters due to the decrease in average shares outstanding resulting from the Company's stock repurchase program.

(Stated in millions except per share amounts)

	Continuing Operations				*Total*	
	Operating		*Income (Loss)*		*Net Income (Loss)*	
	Revenue	*Gross Profit*	*Amount*	*Per Share*	*Amount*	*Per Share*
Quarters — 1987*						
First	$1,031	$ 240	$ 5	$ 0.02	$ 5	$ 0.02
Second	1,053	267	30	0.11	30	0.11
Third	1,089	299	152	0.54	2	—
Fourth	1,229	323	316	1.15	316	1.15
	$4,402	$1,129	$ 503	$ 1.81	$ 353	$ 1.27
Quarters — 1986**						
First	$1,355	$ 434	$ 193	$ 0.66	$ 148	$ 0.51
Second	1,179	315	78	0.27	55	0.19
Third	1,008	160	(59)	(0.20)	(42)	(0.14)
Fourth	1,026	153	(1,867)	(6.60)	(2,179)	(7.71)
	$4,568	$1,062	$(1,655)	$(5.76)	$(2,018)	$(7.02)

**For 1987, income from continuing operations includes a third quarter gain of $69 million ($0.25 per share) on the sale of an investment in Compagnie Luxembourgeoise de Télédiffusion and a fourth quarter nonrecurring credit of $222 million ($0.81 per share). Net income for the third quarter also includes a loss from discontinued operations of $220 million ($0.79 per share) and an extraordinary gain of $70 million ($0.25 per share).*

***For 1986, loss from continuing operations includes fourth quarter nonrecurring charges of $1.74 billion ($6.15 per share). Net loss for 1986 also includes losses from discontinued operations as follows: first quarter — $45 million ($0.15 per share); second quarter — $23 million ($0.08 per share) and fourth quarter — $312 million ($1.11 per share). In the third quarter, discontinued operations includes operating losses of $36 million ($0.12 per share), offset by a $53 million ($0.18 per share) gain from a litigation settlement.*

FIVE YEAR SUMMARY

(Stated in millions except per share amounts)

Year Ended December 31,	**1987**	1986	1985	1984	1983
Summary of Operations					
Revenue:					
Oilfield Services	**$ 2,306**	$ 2,652	$ 3,966	$ 3,616	$ 3,414
Measurement & Systems	**2,096**	1,916	1,619	1,630	1,577
Interest and other income	**325**	370	434	390	279
	$ 4,727	$ 4,938	$ 6,019	$ 5,636	$ 5,270
% (Decrease) increase over prior year	**(4%)**	(18%)	7%	7%	(9%)
Operating income:					
Oilfield Services	**$ 147**	$ 8	$ 1,039	$ 1,170	$ 1,187
Measurement & Systems	**107**	74	69	147	143
Eliminations	**(2)**	(1,614)[B]	1	10	13
	$ 252	$ (1,532)[B]	$ 1,109	$ 1,327	$ 1,343
% Decrease over prior year	**N/A**	N/A	(16%)	(1%)	(25%)
Interest expense	**$ 166**	$ 410[C]	$ 209	$ 146	$ 110
Taxes on income	**$ 116**	$ 106	$ 324	$ 401	$ 363
Income (loss), continuing operations	**$ 503**[A]	$ (1,655)[C]	$ 978	$ 1,173	$ 1,152
% (Decrease) increase over prior year	**N/A**	N/A	(17%)	2%	(19%)
(Loss) income, discontinued operations	**$ (220)**	$ (363)	$ (627)[D]	$ 9	$ (68)
Extraordinary item	**$ 70**	$ —	$ —	$ —	$ —
Net income (loss)	**$ 353**[A]	$ (2,018)[C]	$ 351[D]	$ 1,182	$ 1,084
Income (loss) per share					
Continuing operations	**$ 1.81**[A]	$ (5.76)[C]	$ 3.27	$ 4.07	$ 3.96
Discontinued operations	**(0.79)**	(1.26)	(2.10)[D]	0.03	(0.23)
Extraordinary item	**0.25**	—	—	—	—
Net income (loss)	**$ 1.27**[A]	$ (7.02)[C]	$ 1.17[D]	$ 4.10	$ 3.73
Cash dividends declared	**$ 1.20**	$ 1.20	$ 1.20	$ 1.12	$ 1.00
Summary of Financial Data					
Income as % of revenue, continuing operations	**11%**	N/A	16%	21%	22%
Return on average stockholders' equity, continuing operations	**13%**	N/A	14%	19%	21%
Fixed asset additions	**$ 276**	$ 447	$ 650	$ 559	$ 394
Depreciation expense	**$ 527**	$ 688	$ 700	$ 624	$ 606
Average number of shares outstanding	**277**	287	299	289	291
At December 31,					
Liquidity	**$ 1,759**	$ 2,263	$ 2,511	$ 2,182	$ 2,279
Working capital	**$ 1,761**	$ 2,119	$ 3,349	$ 3,221	$ 3,030
Total assets	**$ 6,741**	$ 8,012	$11,282	$10,913	$ 8,353
Long-term debt	**$ 125**	$ 504	$ 1,014	$ 966	$ 455
Stockholders' equity	**$ 3,836**	$ 4,123	$ 6,877	$ 6,992	$ 5,819
Number of employees	**50,000**	50,000	61,000	64,000[E]	55,000

[A] *Includes nonrecurring credit relating to continuing operations of $222 million ($0.80 per share).*
[B] *Includes nonrecurring charges relating to operating income of $1.60 billion.*
[C] *Includes nonrecurring charges relating to continuing operations of $1.74 billion ($6.05 per share) including pretax interest expense of $228 million.*
[D] *Includes unusual charges relating to discontinued operations of Fairchild Semiconductor with an after tax effect of $486 million ($1.63 per share).*
[E] *Includes 9,000 employees of SEDCO, Inc. and Dowell in North America, acquired in 1984.*

DIRECTORS

Don E. Ackerman°
Partner, J. H. Whitney & Co.
New York City

Euan Baird*
Chairman and Chief Executive Officer
Schlumberger

Robert A. Charpie*
Chairman, Cabot Corporation
Waltham, Massachusetts

Guy Dejouany
Chairman and Chief Executive Officer
Compagnie Générale des Eaux
Paris

John Deutch
Provost
Massachusetts Institute of Technology
Cambridge, Massachusetts

Roland Génin*
Vice Chairman of the Board
Chairman of the Executive Committee
Schlumberger

George H. Jewell°
Partner, Baker & Botts
Houston, Texas

Paul Lepercq*□
Chairman, Lepercq Group Ltd.
Hamilton, Bermuda

Georges de Menil
Economist, Professor
Ecole des Hautes Etudes
en Sciences Sociales, Paris

Yoshihiko Morozumi
Advisor and Former Chairman
Schlumberger Companies in Japan
Tokyo

Felix G. Rohatyn*□
General Partner, Lazard Frères & Co.
New York City

Pierre Marcel Schlumberger°
Attorney, Houston, Texas

Nicolas Seydoux
Chairman and Chief Executive Officer
Gaumont, Paris

Richard R. Shinn°□
Executive Vice Chairman
The New York Stock Exchange
New York City

°*Member Audit Committee*
**Member Executive Committee*
□*Member Finance Committee*

OFFICERS

Euan Baird
Chairman and Chief Executive Officer

Roland Génin
Vice Chairman of the Board
Chairman of the Executive Committee

Arthur Lindenauer
Executive Vice President
Chief Financial Officer

Michel Gouilloud
Executive Vice President

René Mitieus
Executive Vice President

André Salaber
Executive Vice President

Roy Shourd
Executive Vice President

Ian Strecker
Executive Vice President

David S. Browning
Secretary and General Counsel

Jean Boucharlat
Vice President

John D. Ingram
Vice President

Allen D. Klein
Vice President

André Misk
Vice President

Jean-Dominique Percevault
Vice President

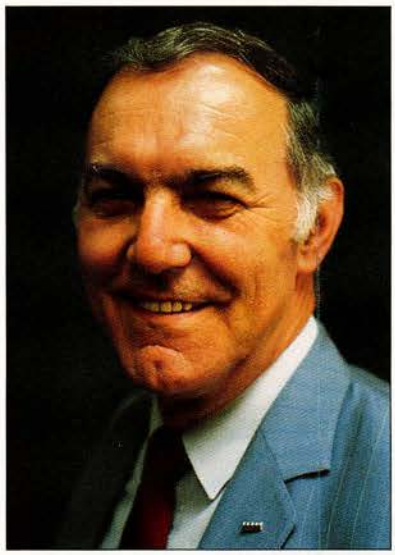
Patrick J. B. Corser
Controller

Andrew Gould
Treasurer

André Laloux
Assistant Secretary

James A. MacKenzie
Assistant Secretary

Thomas O. Rose
Assistant Secretary



ROLAND GENIN ELECTED VICE CHAIRMAN OF THE BOARD

On July 16, the Board of Directors of Schlumberger, upon the recommendation of Euan Baird, elected unanimously Roland Génin Vice Chairman of the Board. He is in charge of Oilfield Services. In announcing the election, Baird stated, "In his new position, Roland Génin will ensure that the Oilfield Services, a vital sector for Schlumberger, receives the direction it needs during a critical and changing industry environment."

Other management appointments:
Michel Gouilloud, Executive Vice President, responsible for Schlumberger Technologies;
John D. Ingram, Vice President – Chief Technical Officer;
Jean Boucharlat, Vice President, responsible for operations in Japan.

Stock Transfer Agent
Morgan Shareholder Services
Trust Co.
New York, New York

Registrar
Morgan Shareholder Services
Trust Co.
New York, New York

Schlumberger stock is listed on the
New York (trading symbol SLB)
Paris
London
Amsterdam
Frankfurt and
Swiss stock exchanges

Form 10-K
Stockholders may receive without charge a copy of Form 10-K filed with the Securities and Exchange Commission on request to the Secretary, Schlumberger Limited, 277 Park Avenue, New York, New York 10172.

Design
Milton Glaser Inc.

Illustrations
Guy Billout

Photograph
Carlos Freire

Schlumberger

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