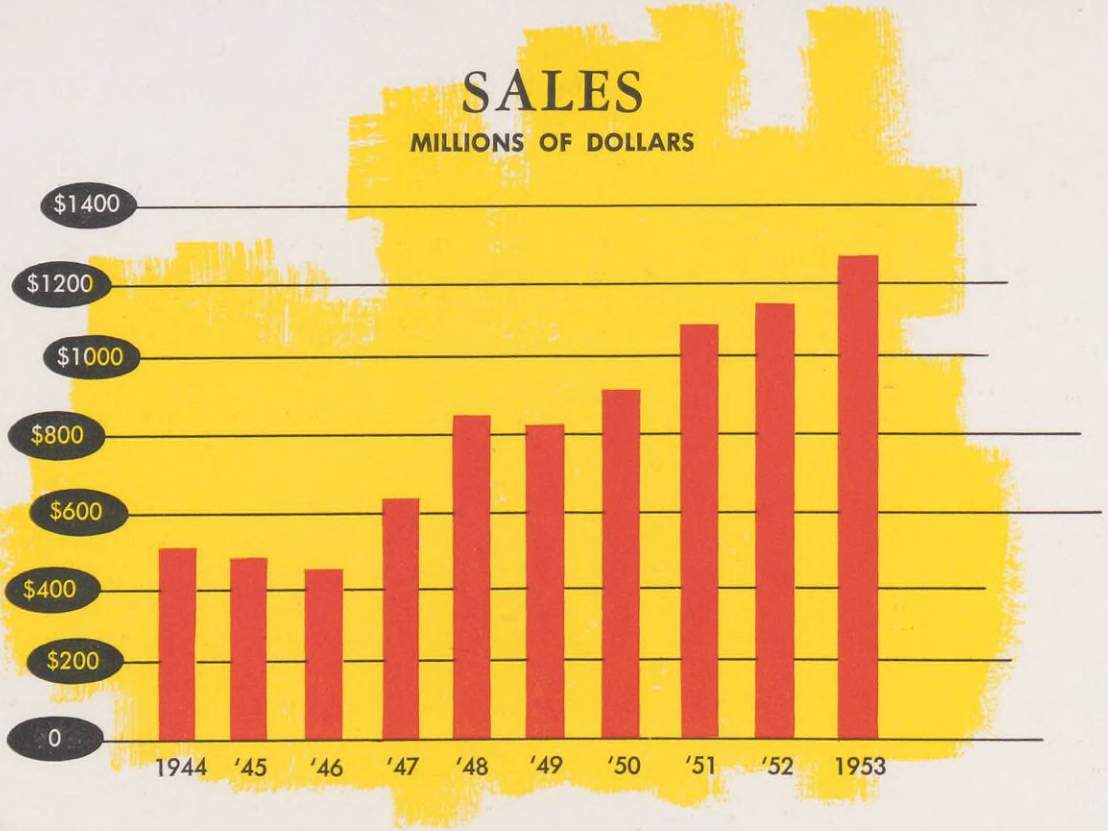
SHELL NEWS

a review of Shell's 41st year

APRIL 1954



WE

Progress

WE all know that 1953 was a successful year for industry as a whole and for the oil industry in particular. Domestic motor fuel demand increased 6.6 per cent over 1952. It is gratifying to report that Shell did considerably better than this in the face of strong competition.

The introduction of Shell Premium with TCP has been an unqualified success. Since July 1st when the new product was introduced throughout the Company's sales territories, sales have risen sharply with but very slight effect on sales of the regular or House-brand grade. Current 1954 sales reflect the same trend.

The reaction of the motoring public to the new product was not lost on our competitors. Anyone who has a television or radio set or who reads a daily newspaper knows that an all-out battle is being waged for the gasoline market. What we are apt to overlook, however, is that the battle did not start with the introduction of Shell Premium with TCP last July. Aggressive competition for the gasoline market is as old as the oil industry itself. It is true that there has been more sound and fury during the last eight or nine months, but the basic fact remains; competition has always been keen in the oil industry. The introduction of Shell Premium with TCP gave us a tremendous advantage in the gasoline market but we can be sure that our competitors will do everything they can to overcome that advantage.

Although TCP held the spotlight in 1953, the Company made outstanding progress in other respects. Our long-term exploration program resulted in important discoveries at Cabin Creek, Montana and at Block One—University Lands in West Texas. During the last three months Shell has been instrumental in adding two more to the list of oil-producing states. At the turn of the year we brought in the first commercial oil well in South Dakota and just a few weeks ago a Shell drilling crew turned the trick in Nevada. It is much too early to evaluate either one of these discoveries, but the Nevada well in particular has aroused considerable public interest since it was preceded by about 75 dry holes drilled in that state by many oil men over a period of years.

Last year we produced 104 million barrels of crude oil. Yet in spite of this tremendous demand on our sources of crude, at the end of the year Shell's reserves in the ground were substantially more than they had been at the end of 1952. In fact, they were more than they had been at the end of any year in our history.

Our refineries processed 150 million barrels of crude. For the third straight year, we topped the billion dollar mark in sales, part of which can be credited to a considerable increase in sales volume of chemicals.

Future Prospects

While all agree that 1953 was an outstanding year, many people have misgivings about 1954 and later years. I do not share their sentiment, particularly as it relates to Shell and the oil industry.

by H. S. M. Burns, President, Shell Oil Company

ARE PUSHING AHEAD

Made in 1953 Has Greatly Improved Shell's Competitive Position

There are two basic facts about the oil industry which we should bear in mind: 1) It is a growth industry. By that I mean that year after year the demand for oil products has increased, and the saturation point is not in sight, and 2) The demand for oil products is not as sensitive to general business fluctuations as is the demand for many other commodities.

There is at present an ample supply of oil products; that is as it should be. It has been the constant aim of the oil industry to provide its customers with quality products wherever and whenever they want them. The oil industry has built up substantial reserve refining capacity in the interest of national defense. Looking ahead to a continued, though slower, rate of increase in demand, we should be able to achieve a better balance between seasonal requirements of major refined products because of the flexibility which the spare refining capacity provides.

In this issue of SHELL NEWS you will find evidence that Shell has grown steadily over the years, but always on a firm foundation. We have not overexpanded our facilities nor have we overextended our sales efforts into markets where competitors have an economic advantage due to favorable location of refineries and bulk terminals.

Last year we spent $237,712,000 in the search for more oil reserves, for building new refinery units and chemical plants, for new pipe lines, additional storage capacity, bulk terminals and service stations, and for countless smaller tools and equipment. As it looks now, this high level of capital expenditure will continue through 1954 and 1955.

This does not mean that we expect to make the same spectacular gains in the next few years that we made in 1953. But it does mean that we expect to continue our upward climb.

Among other things, we are pushing ahead the long-term exploration and production program which, so far, has been highly successful. Last December, for example, Shell acquired 37,700 acres of offshore lands at a State of Texas competitive sale. Exploration and drilling of some of these properties is planned in 1954. Activity in the Williston Basin is proceeding at an accelerated rate both in the United States and Canada. In fact, the territory in which our exploration and production people are working stretches from the Gulf of Mexico to the Arctic Circle and includes almost every geographical region having oil potential.

Ground is now being cleared for the new Anacortes Refinery which has a design capacity of 50,000 barrels a day. If all goes well, we hope to have the refinery in operation by the end of 1955. Expansion of the Norco Refinery will be completed in July of this year and a 12-inch products pipe line is being constructed to connect Norco and the Plantation Pipe Line at Baton Rouge, Louisiana. Also at Norco, a new chemical plant is going up to provide raw materials for the manufacture of EPON resins and additional supplies of synthetic glycerine.

These facts, better than any words, demonstrate our confidence in the future of Shell, the oil industry, and the nation as a whole.

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Dedicated to the principle that the interests of employees and employer are mutual and inseparable

Employee Publications Department
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contents

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EXPLORATION AND PRODUCTION

Shell Ranged Wider and Deeper in Its Search for Oil and Gas—and Again Broke Some of Its Own Drilling and Production Records

THOUGH the Exploration and Production organization again topped its own records for drilling, production and oil reserves in 1953, the most significant thing about the year's activities was the ground covered. Geographically, Shell exploration and drilling crews were fanned out almost the length and breadth of the Continent. In some cases they probed—and found oil or gas—in areas that had never before seen a drilling rig.

In all, 153 exploratory drilling tests resulted in 37 new discoveries. Some of these were wide extensions of existing fields or the discovery of new and deeper production in previously proven areas. But a majority of the

discoveries were rank wildcats. They ranged as far north as the northeast corner of British Columbia in Canada, where two discoveries were brought in. There were also five in Alberta and one in Saskatchewan. In the United States, there were ten in Louisiana, eight in Texas, three in California, three in Montana, two in Colorado, one in Mississippi, one in New Mexico, and another in South Dakota.

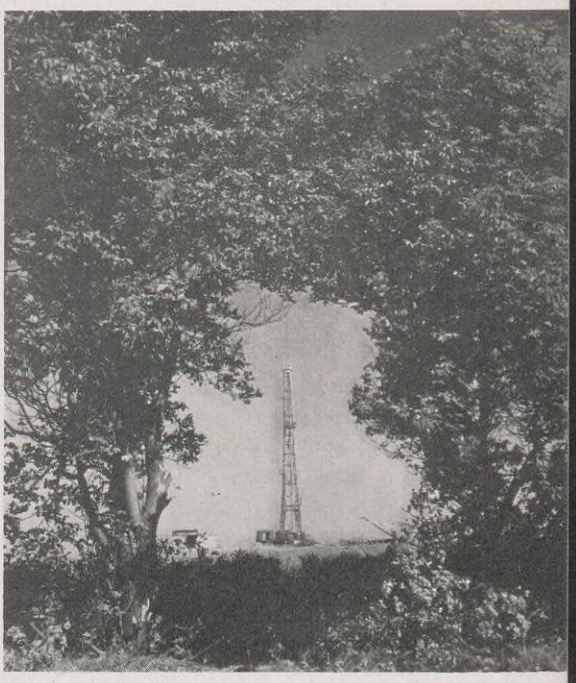
This last well, which was not completed until early in 1954, gave South Dakota its first commercial oil production. As it was being tested, another wildcat was being drilled in Nevada which has since shown indications of commercial oil and the possibility that Shell may add yet another state to the nation's list of oil producers.

Perhaps the most noteworthy of the year's oil discoveries was in the Williston Basin at Cabin Creek, Montana. Here, on the Baker-Glendive anticline, Shell completed a prolific well and development drilling is in progress. Other discoveries of significance, on the basis of present information, were at Midale, in the Saskatechewan sector of the Williston Basin; at West Lovington, in the southeast part of New Mexico, and in Block 1 of the University of Texas lands in West Texas.

The broad geographical scope of Shell's far-flung wildcats was not the limit of its exploratory pattern, however. Company exploration crews, and contract crews working for the Company, ranged out into the waters of the Gulf of Mexico. They spread from Kentucky and Mississippi to the Pacific Ocean. A new exploration group was organized specifi-

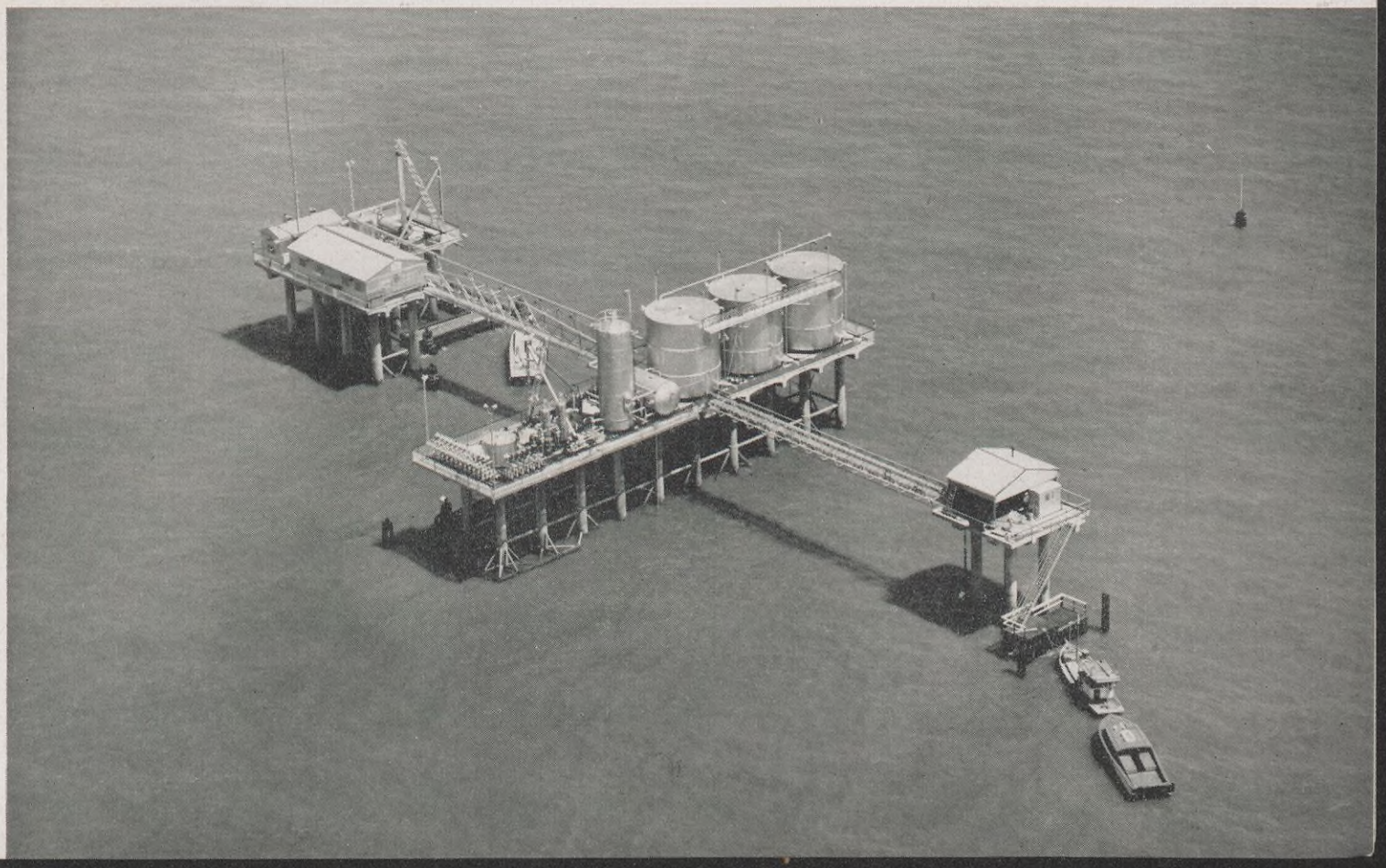
The Record of Shell's 1953 Exploration and Production

	1953	1952
Net Crude Oil Produced (barrels)	104,267,590	96,099,000
Natural Gas Produced (million cubic feet)	316,362	266,515
Wells Drilled—Oil	755	672
Wells Drilled—Gas	79	36
Wells Drilled—Dry Holes	168	138



Exploratory drilling resulted in discovery of the Midale oil field in Saskatchewan. This well is one of seven drilled in the field in 1953.

To handle increasing production of the submerged field in Main Pass Block 35, Louisiana, this platform on concrete pilings was constructed for Shell. Thus production facilities are high enough to escape tide and wave damage.



cally to investigate the possibilities of finding oil and gas in Alaska, and some reconnaissance exploration was undertaken during 1953.

Other interesting developments related to exploration took place during the year. When the Federal Congress clarified the question of "Tidelands" ownership, leasing, exploration and development all were accelerated in the Gulf. In December, Shell acquired leases on more than 37,700 acres of offshore lands in a single competitive auction held by the State of Texas. In Apache County, Arizona, Shell is currently drilling a wildcat, which climaxes two years of geological and geophysical work on Navajo Indian lands in southeastern Utah and northeastern Arizona. At what turned out to be the largest oil and gas lease sale ever made by the U. S. Indian Service, Shell acquired leases on 115,000 of the one-half million acres of Navajo lands offered in the sale. In another facet of exploratory work, an unusually high number of stratigraphic tests were drilled by Shell in the United States and Canada during the year.

Meanwhile, Shell's production and development drilling activities were again breaking records. Development wells drilled during 1953 totalled 849 —of which 52 were dry. On the credit side were 733 oil wells and 64 gas producers, as Shell brought in an average of more than two wells a day. Perhaps the most important additions, in number of wells or the amount of production, were made in the Big Mineral Field in north Texas, where 26 new producers were completed; in the South Pass Block 24 Field in a bay off the Gulf of Mexico; in the Weeks Island, Louisiana, Field, where the world's deepest production record was broken twice by Shell during the year only to be lost again to a well in California; in the Brea Canyon, South Mountain and Ventura Avenue Fields of California; the Denton Field in New Mexico, and in the Caprona area of Alberta, Canada. In the Big Foot Field of East Texas no less than 98 oil wells were completed, boosting the field's average monthly production from 83,000 to 121,000 barrels. In the process, Shell's Company Rig No. 20 established what is believed to be a world drilling record by making 331,316 feet of hole and averaged less than four days per well.

The additional development wells and the year's new discoveries again brought Shell production to record levels. Production totalled 104,268,000 barrels of oil, an increase of more than 8 million barrels over 1952, and 316 billion cubic feet of gas, an increase of about 50 billion cubic feet.

Jack Cameron, of Shell's Seismic Party No. 54 unloads tamping rods from a truck on location in Colorado. Exploration not only was accelerated in areas of previous activity, it was fanned out from the Mexican border to Alaska. Shell entered several areas for the first time.

By using these "muskeg tractors" Shell crews were able to explore portions of Canada in summer where operations had previously been restricted to winter when the bogs were frozen.

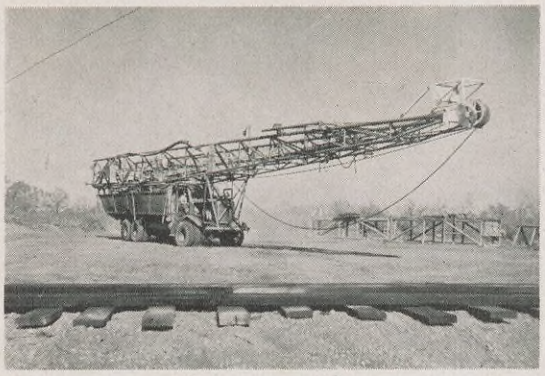
Despite this record output, new discoveries, extensions and revisions of existing fields left Shell with more estimated reserves still in the ground than ever before.

As the search for oil went on, gas production also resulted. Shell had a number of interesting gas discoveries in 1953—there were 15—and its natural gas processing plants underwent considerable expansion.

Among Shell gas discoveries of 1953 was the North Kirby Hills field in northern California. Coincidentally, two Shell wildcats on leases also named Kirby brought in new gas fields in Tyler County, Texas. Another Texas gas discovery was made in Matagorda County, and the new Aberdeen gas field was discovered in Mississippi.

Gas-gasoline handling facilities, including gathering systems, compressor, cycling and manufacturing plants, were installed or expanded in several fields. They included:

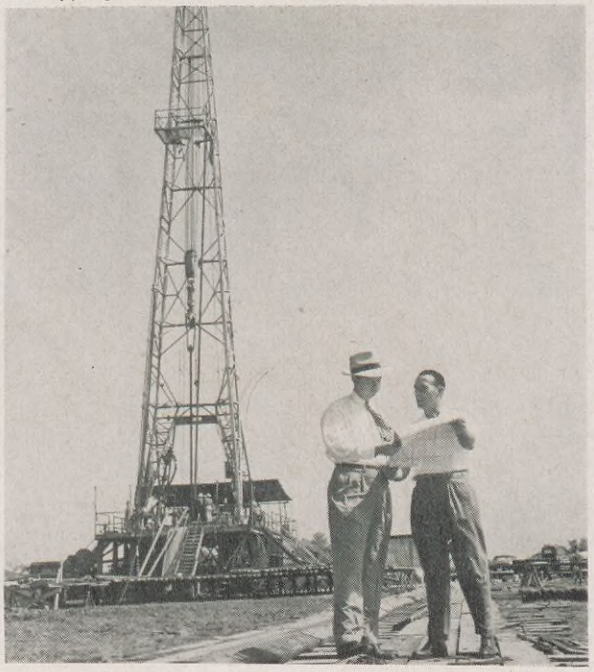
1) Expansion and revision of the Ventura, California, natural gas processing plant to increase its capacity by one-third, and additions to the Brea Canyon gas plant, 2) expansion of Shell of Canada's Jumping Pound gas plant and completion of plans for yet another enlargement, 3) installa-



Hustling Company Rig No. 20 drilled 98 wells in the Big Foot, Texas, field during the year, probably setting a speed record.

Water flooding at Coalinga, California, was part of widespread activities to increase production. Above, two Shell men study cores at Coalinga. Below, two others look over a map of the Aberdeen, Mississippi, gas field, discovered and developed by Shell in 1953.

Mud and water spout from a "shot hole," below, as a Shell seismic party works near East Glacier, Montana. Mountains in background are part of the Continental Divide.



tion of gas handling facilities in the West Lake Verret, Turtle Bayou, St. Gabriel and Burtville fields of Louisiana, with gas processing facilities also installed at Burtville, 4) further expansion of the Elk City, Oklahoma gas processing and cycling plant and an enlargement of the unitized area it serves, 5) additions to the Dillard, Oklahoma, and Wasson, Texas, plants, 6) installation of a gathering system in the Red Fish Bay, Texas, field, and of a gathering system and compression facilities in the Helen Gohlke Field. At Sheridan, Texas, Shell's gas cycling plant, which was seriously damaged by an explosion in January, was back in full production in June following repairs. At the Wasson and Elk City plants, "salt jugs," for underground storage of liquefied petroleum gases, were being hollowed out or enlarged in underground salt formations.

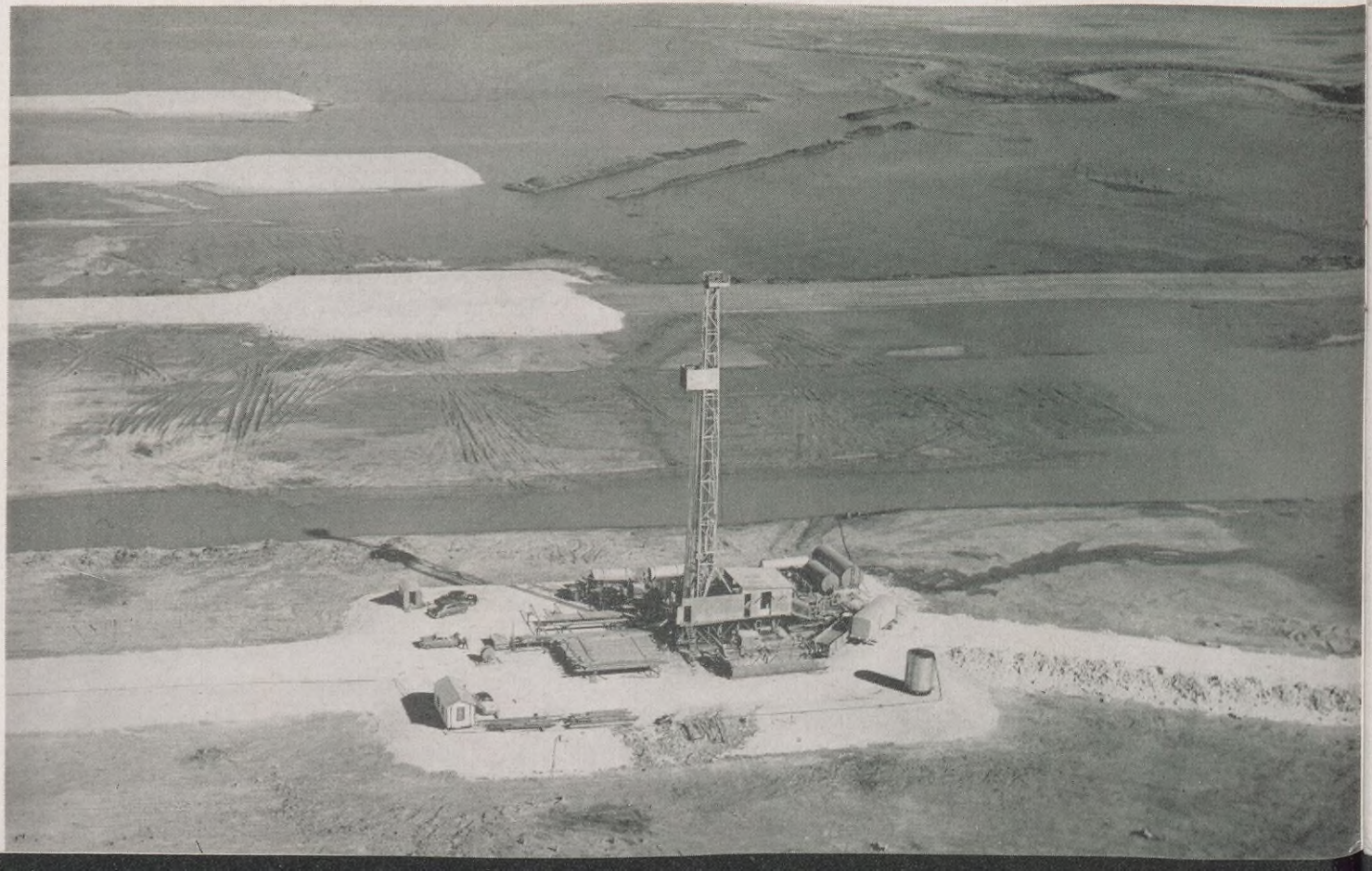
At several locations, Shell completed new and improved contracts for the sale of natural gas. The largest contract of the year was for gas in the prolific Keyes Dome Field of the Oklahoma panhandle, where Shell's holdings cover 14,000 acres. Sales of 50 million cubic feet per day of residue gas from the Sheridan Field was started in December 1953.

Throughout Shell's production activities a number of companion projects were carried out to improve and increase the output of various fields. Sand fracturing and water flooding boosted the production of some fields; automatic equipment to handle the flow of oil from leases was installed in others. In California, a new five-mile crude oil line was laid from the South Mountain Field to join the Ventura-Wilmington pipe line. In Main Pass Block 35 on the Louisiana coast a new "island" production platform was completed to handle the output of Shell wells in the submerged lands. In Texas, Shell installed experimental permanent type completion equipment on several wells, which is designed to eliminate the need of service rigs and to save thousands of dollars on recompletion jobs. At Lake Texoma, on the Texas-Oklahoma border, Shell was busy building raised earth islands for future drilling on land which will eventually be flooded as the area of the lake is broadened.

Backing up and assisting the field operations were the continuing activities of the Exploration and Production Technical Services Division, headquartered in Houston. Among the Division's investigative projects on which progress was reported were:

1) A study of the application of high-speed electronic computational devices to the interpretation of geophysical data, 2) studies aimed at better definition of the size and shape of oil and gas traps in the earth, 3) improvement of methods for identifying the nature and fluid content of rocks, 4) study of the cost of finding, developing and producing of oil, 5) reservoir studies in several fields to provide data for unitization, 6) coordination of engineering studies undertaken by Shell's coastal Areas regarding all phases of offshore drilling, 7) corrosion studies, 8) underground storage studies, 9) field trials

In the Big Mineral Field, located partly in Lake Texoma on the Texas-Oklahoma border, earth islands had to be built during low water to insure future access to drilling and production sites on land which will be flooded by waters of the lake. Thus, Shell faced "offshore" problems far inland.



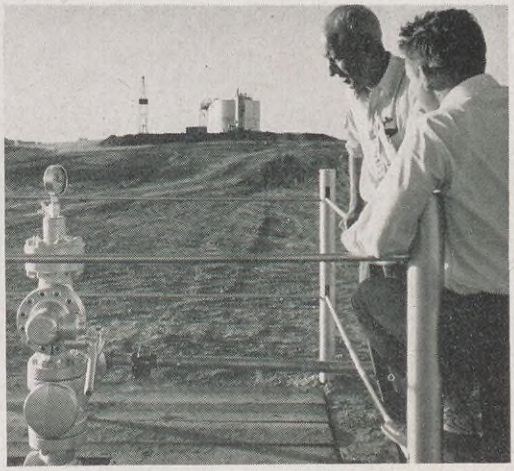
A new crude oil pipe line, to join Shell's South Mountain Field in California with the Ventura-Wilmington pipe line, encountered almost vertical drops and climbs on its five-mile route. The field, which has been rapidly developed since 1951, perches 2,200 feet at its highest point.

of a new drilling mud recently developed by Shell Development Company.

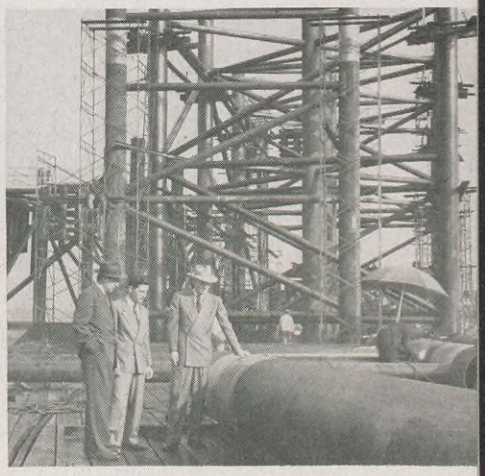
In the field of recruiting and training, which is coordinated by the Technical Services Division, 99 technical graduates were employed during the year and these men are now undergoing intensive training, including lecture courses and field operations, before permanent assignment. Some training courses were also open to senior personnel for review purposes.

In retrospect, 1953 was a banner year for Shell's Exploration and Production organization. In fact, activity and interest in new areas of promising or potential production was sufficient to justify the creation of several new operating Divisions within the Areas and the establishment of an entirely new Area organization in its own right—the Denver Exploration and Production Area, which began official operations as an Area on January 1, 1954. The new office will supervise exploration and production activities in the Dakotas, Montana, the eastern parts of Wyoming and Colorado, western Nebraska, and northeastern New Mexico. The region, which includes the Williston Basin and the eastern slopes of the Rocky Mountains, was previously about equally divided between the Pacific Coast and Tulsa Areas.

The Sheridan, Texas, gas cycling plant, which was seriously damaged by an explosion in January, was repaired and put back in full production by mid-year.



Above, Shell men look at the discovery well of the prolific Cabin Creek Field in Montana. One of several development wells and a lease tank are in background.



Technical Services Division advanced several phases of research, including offshore equipment like that above.

MANUFACTURING

1953 Was A Record Year For Shell Refineries as Expansion Programs Moved Ahead

THE Manufacturing Department's five refineries established another milepost during 1953 by processing the greatest amount of crude oil in their history. Total throughput amounted to 7.5 per cent more than the 1952 performance. It also topped the 1951 figure, the previous record high.

Biggest news of the year was the announcement of plans for constructing a new 50,000-barrel per day refinery in the Pacific Northwest. Also of major significance were the strides made at all five existing refineries in an expansion and modernization program which will add an additional 100,000 barrels per day to Shell's refining capacity. New units went on stream at three locations and other facilities continued under construction at all refineries, most of which will contribute to the oil industry's efforts to build up refinery capacity for national defense.

First of the new units to begin op-

eration in 1953 was a benzene and toluene platforming unit at the Houston Refinery. The largest of its kind in the United States, the unit went on stream early in the year. It is capable of producing more than 450,000 barrels of benzene a year—10 per cent of the nation's total output—and over 785,000 barrels of toluene. Both products have a wide range of uses in industry.

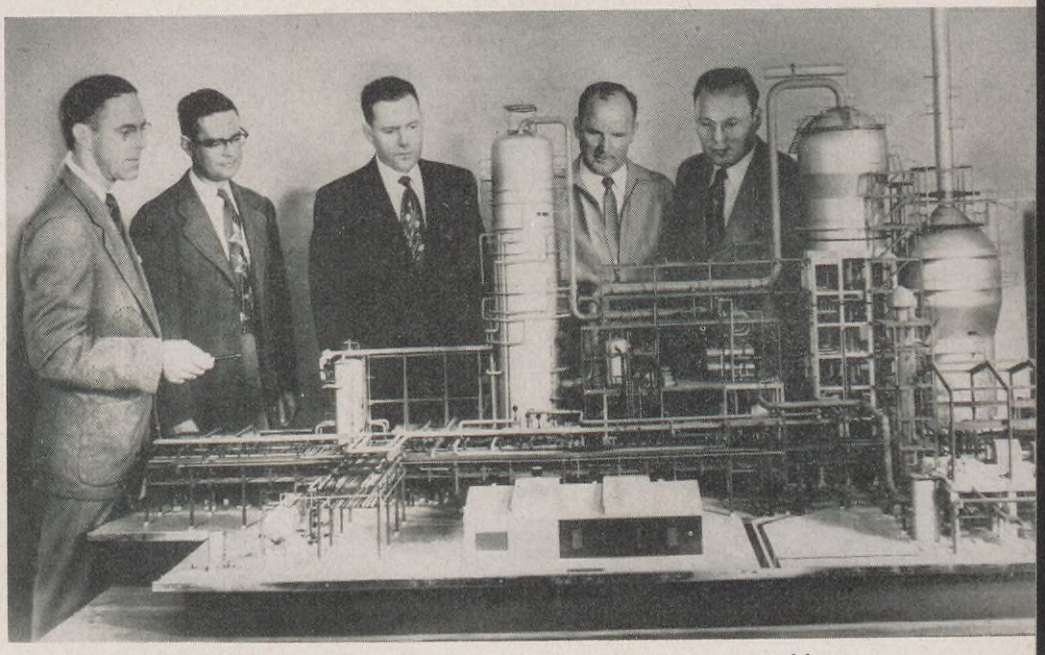
At the Wood River Refinery, a new catalytic cracking gas recovery unit started operation at mid-year. A new crude oil distilling unit went on stream in December. Completion of the balance of the Wood River expansion program, which includes a naphtha platforming unit, catalytic cracking feed preparation unit, alkylation plant, and auxiliaries, is expected by the middle of 1954.

During the year, construction also moved ahead on the expansion of major facilities at the Norco Refinery. Being added are, a crude distillation unit, a catalytic cracking unit with feed preparation and product recovery facilities, alkylation and polymerization units, as well as utilities, tankage, treating and shipping facilities. Their completion, expected about the middle of 1954, will increase the refinery's intake by 50 per cent, to 75,000 barrels a day.

A new crude distilling unit went into operation in November at the Wilmington Refinery. It replaced several older units and increased the refinery's throughput by approximately 17,000 barrels a day. The new unit permits better fractionation and improves product quality.

At Martinez, the other West Coast refinery, plans were completed for a new naphtha platforming unit that will materially contribute to the supply of high quality motor gasoline in California. Field work was started about the end of the year and com-

Clearing operations, above, began at year's end on the site of a new refinery at March's Point, near Anacortes, Washington. Refining operations will start about the middle of 1955.



Model of a "cat" cracker, above, under construction at the Norco Refinery is inspected by members of the refinery's Catalytic Cracking Department. Unit will add 50 per cent to Norco's capacity.

Fire and safety precautions included the addition of a new AER-O-FOAM trailer, right, to facilities at the Wilmington Refinery.

Current Refinery Capacity	Barrels/Day
Wood River	170,000
Houston	125,000
Wilmington	79,000
Martinez	55,000
Norco	50,000

pletion is expected by mid-1954.

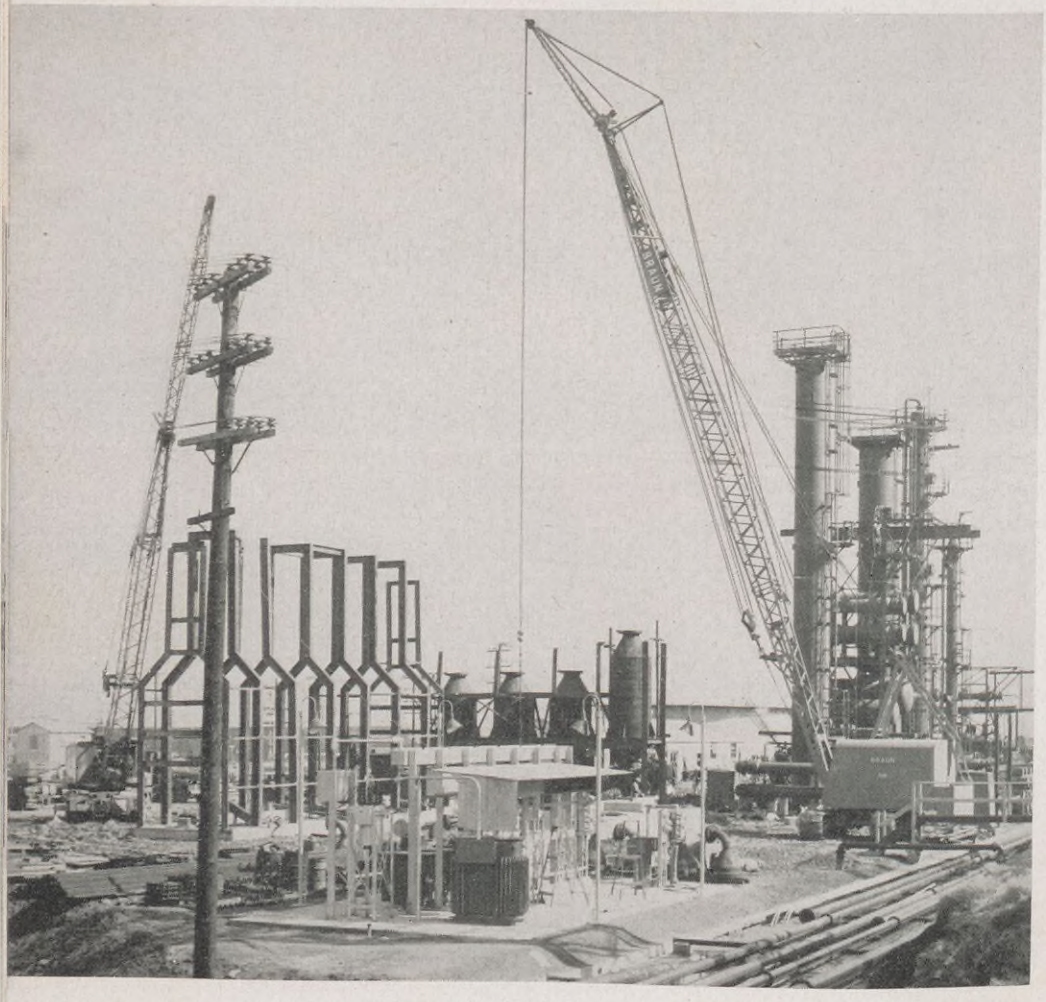
The decision to build a new refinery on Puget Sound in the state of Washington, was based on the rapid industrial and population growth in the Pacific Northwest, coupled with a predicted long-term shortage of crude oil supplies in California. The site for the new refinery is at March's Point, near the town of Anacortes, Washington. During the year, the over-all analysis of the project was completed, the construction contract was let, and detailed designs of facilities were in progress. Clearing of the ground began the latter part of 1953. Field construction will get under way by mid-1954.

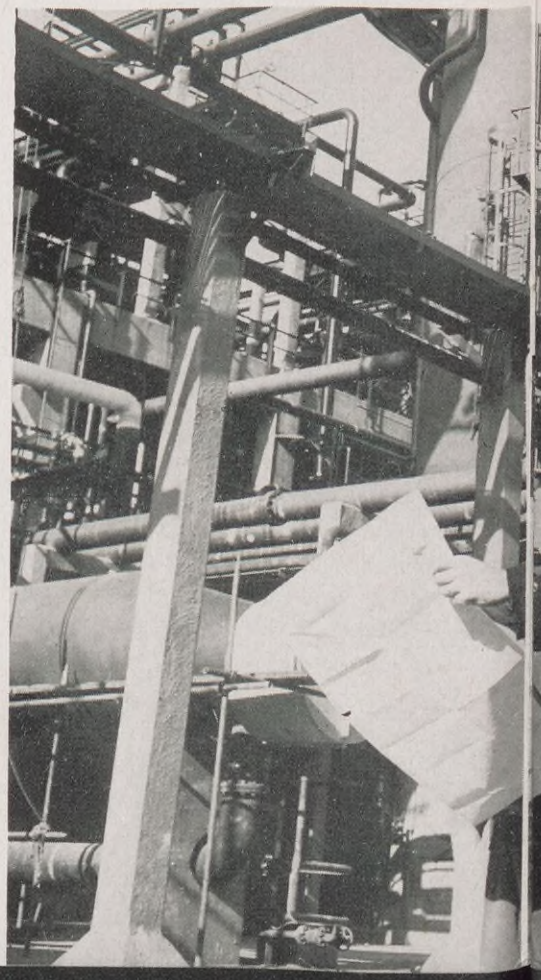
The new refinery, Shell's sixth, will have a daily capacity of 50,000 barrels of Canadian crude—to be delivered to the refinery by an extension of the Trans-Mountain Pipeline, which now terminates at Vancouver, British Columbia. Processing units will include a crude oil distillation unit, naphtha platformer, and catalytic cracking unit with feed preparation, gas recovery and polymerization units. The crude distillation unit and platformer are scheduled for earlier completion so that crude oil can be refined starting about the middle of 1955; the catalytic cracking unit and other facilities will be completed by the end of that year.

A major improvement to be incorporated in the new refinery is a recent development in the basic fluid catalytic cracking process—the result of three years of pilot plant work. Compared to conventional methods, the new development increases the commercial value of the products of cracking. At the same time, it provides improved flexibility in meeting summer gasoline and winter heating oil demands.

Another high point of 1953 was the introduction of TCP motor gasoline additive through which Shell Premium gasoline set a new quality standard for the industry. This additive, which increases spark plug life by 150 per

Construction of a new platforming unit was started at the Martinez Refinery, below. With a daily capacity of 4500 barrels, the new unit is expected to be completed at mid-year.

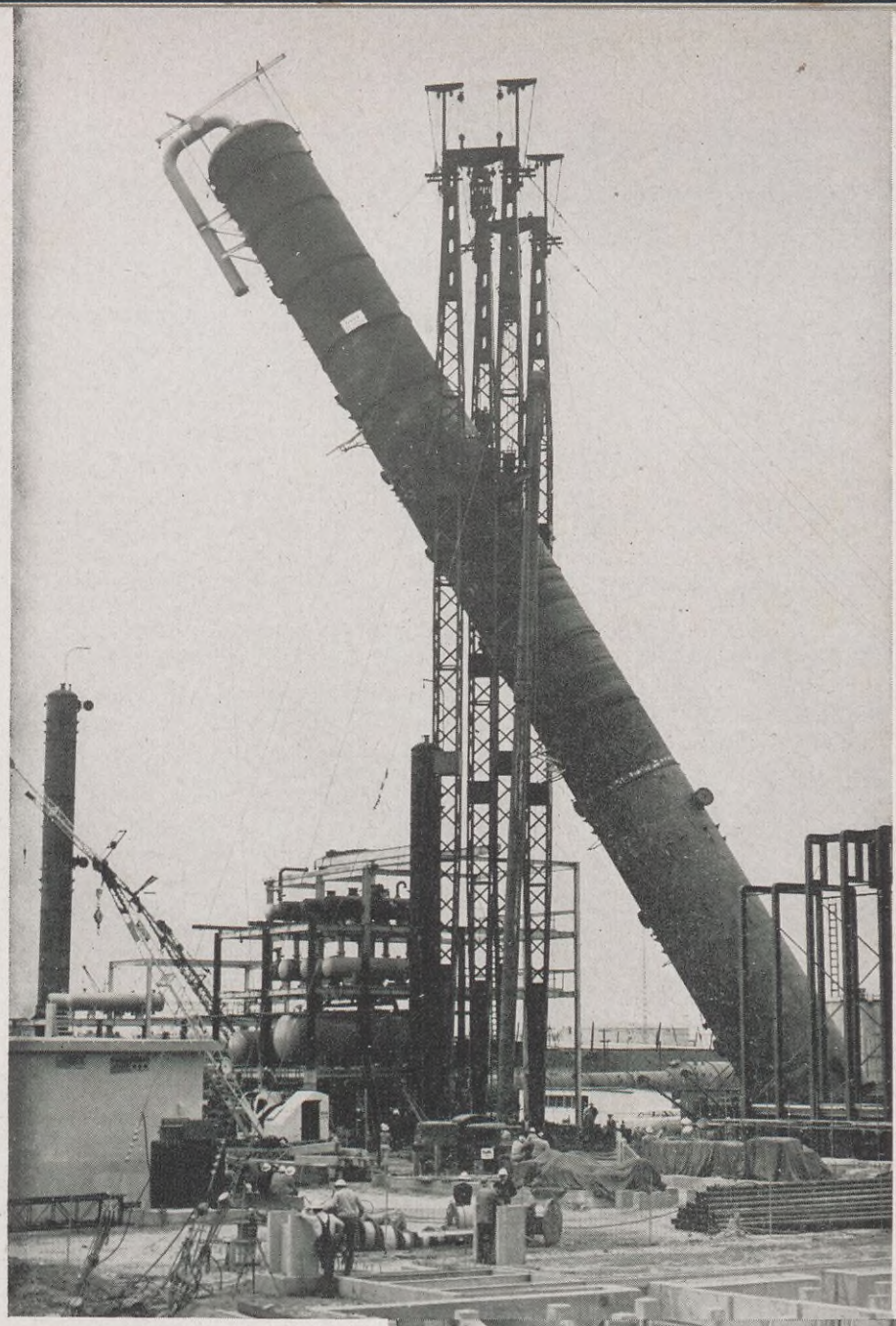




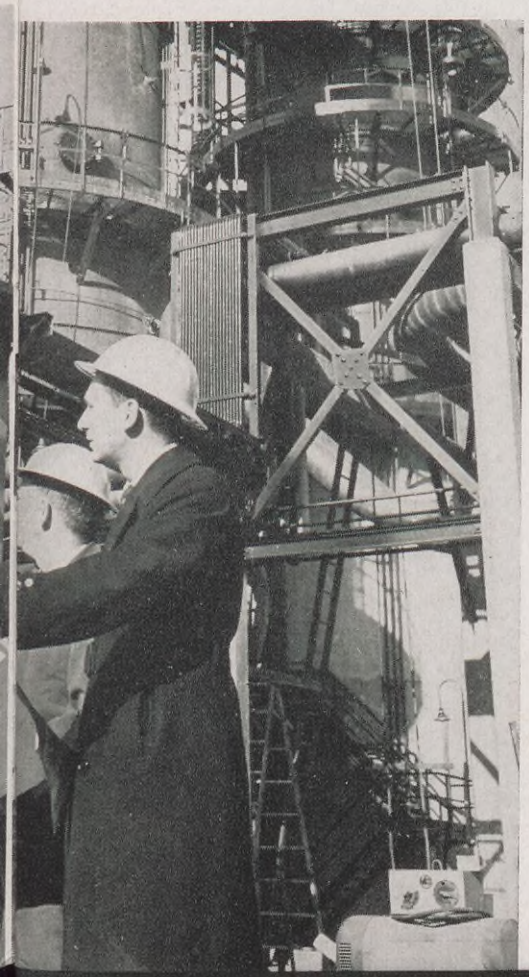
cent and reduces preignition knock, was the result of over four years of intensive research.

The year also saw Manufacturing start commercial production of Shell Sol 72, an odorless paint thinner developed as a result of the paint industry trend toward products of mild odor. There were many difficulties in developing a product which would be compatible with high quality alkyd resins, but the problem was finally solved by the "Shell Alkyd Reduction Technique," which makes it possible to formulate high quality paint using the odorless thinner.

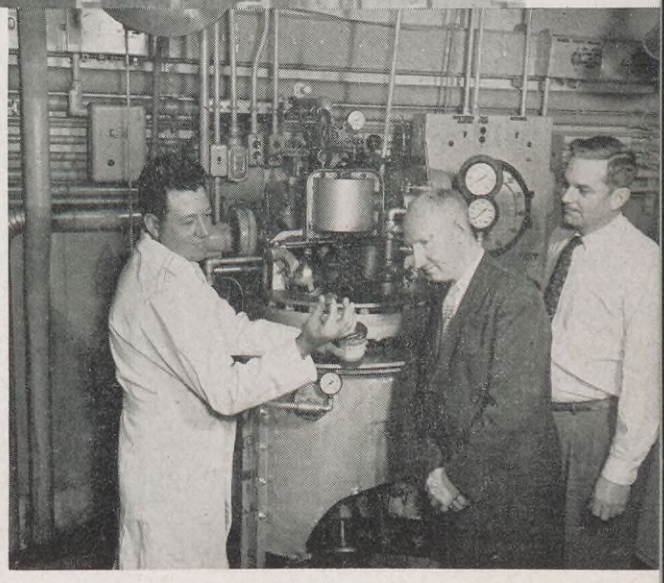
Other research studies were continued which resulted in improvement in the quality or performance of several products. Of particular importance was the improvement of X-100 motor oil to insure its continued superiority under the severe conditions prevailing in the latest model cars. Lubricating greases were also improved in high temperature performance and corrosion protective properties.



Huge fractionation tower, above, went up at the Wilmington Refinery. The tower is part of the refinery's new crude distilling unit.



Among several new units put on stream at the Wood River Refinery last year was the crude distilling unit, left. It was completed in December.



Progress in research also continued at Shell's refinery laboratories. Men at right are discussing a new aviation lubricant developed at the Martinez Refinery Research Laboratory.

TRANSPORTATION AND SUPPLIES

Heavy Purchases and the Increased Use of Transportation Facilities Helped Shell Keep Abreast of Strong Product Demand in 1953

SHELL and the industry were able to provide the United States with ample supplies of petroleum products last year despite greatly increased demand. The favorable supply position was made possible by the industry's stepped up refinery expansion program together with ample supplies of crude oil. Aviation gasoline supplies were adequate for the first time in three years because of the country's newly completed alkylation capacity and the drop in demand

The pipe shown being coated went into construction of the Wolverine Pipe Line which was completed and placed in operation in 1953. Shell, which has a 40 per cent interest in the common carrier line, designed it, supervised its construction, and operates it for the Wolverine Pipe Line Company.

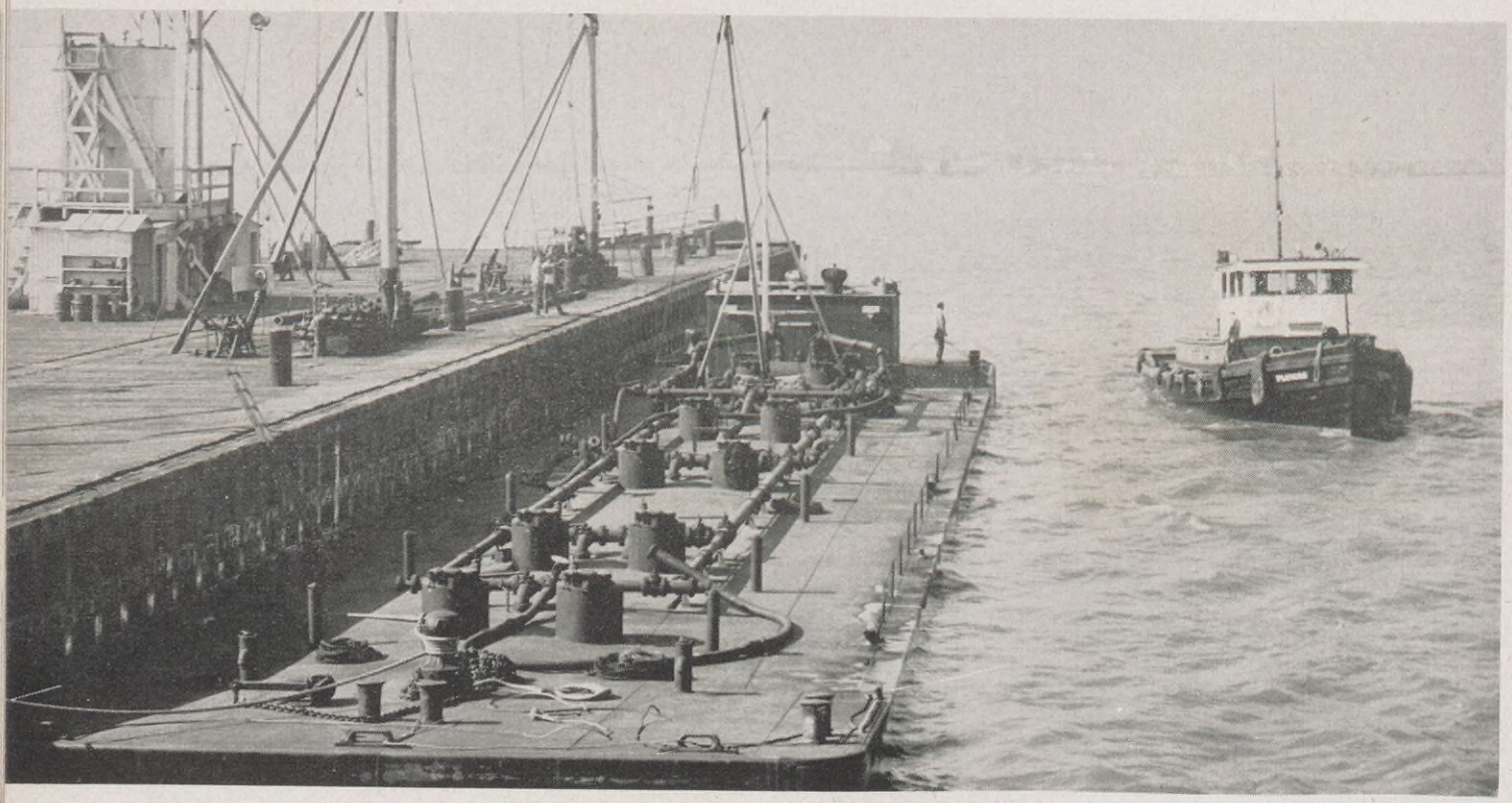
following the Korean armistice.

Demand for Shell gasoline, particularly Shell Premium with TCP, far exceeded the industry average. To meet the heavy increase, while refinery expansion projects were under construction, Transportation and Supplies purchased substantial quantities of top-grade gasoline and blending components for conversion into Shell Premium Gasoline with TCP.

In line with demand, Shell's 1953 transportation schedule was also heavy but completion of several new projects assisted in maintaining efficient distribution of products.

Two modern, 18,000-ton ships were launched and allocated to Shell's service by one of Shell's contractors for tanker transportation. Each has a capacity 10 per cent greater than that of a T-2 tanker and can serve any of Shell's tanker terminals. In addition, two modern towboats and 10 barges totalling 212,000 barrels capacity

The Shell tank cars pictured below are waiting to be loaded with crude oil on the Fallon siding near Glendive. This producing area of eastern Montana is a part of the Williston Basin.



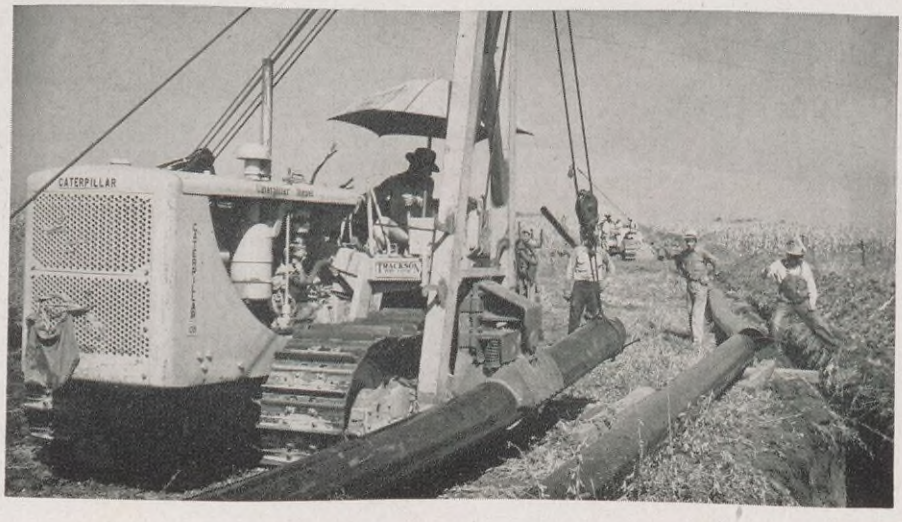
The barge pictured above is shown on the Sacramento River in the San Francisco Bay Area; below, the tow about to enter a lock is following an icebreaker up the Mississippi River to the St. Paul Terminal. Last year, more than 81 million barrels of Shell products were moved by barges.

The tractor at right is bending pipe into position for the Wood River-East Chicago/Argo Products Pipe Line which was enlarged last year and carried 17 million barrels of products.

were allocated under transportation contracts for service on the Gulf Coast and Mississippi River systems, and a 6,500-barrel tanker was likewise allocated for New York harbor deliveries. Barge movements of lube oils between Houston and Wood River, and of petroleum products up the Willamette River between Willbridge and Albany, Oregon were begun last year.

Enlargement of the Wood River-East Chicago/Argo Products Pipe Line enabled it to carry 17 million barrels of products in 1953, as against 11 million in 1952. The capacity of the Wilmington-Los Angeles products line was increased 3,000 barrels daily by the addition of a new booster station and larger pumping equipment.

A major achievement was Shell's



design and construction of a new, 16-inch, common carrier products pipe line for Wolverine Pipe Line Company. Running from East Chicago to Detroit and Toledo, the 300-mile common carrier is perhaps the most modern products line in existence. Shell has a 40 per cent interest in this line, and operates it under an agency agreement. Use of the Wolverine, and a new short line connecting Sewaren to Syracuse, N. Y. via the Buckeye Pipe Line, reduces transportation costs and improves product availability in areas which are ice-bound for three to four months each year.

The Plantation Pipe Line Company, in which Shell has a 24 per cent interest, constructed a 14-inch line paralleling the 10-inch line east from Charlotte, N. C. This completed the parallel system all the way from Baton Rouge, La., to Greensboro, N. C. And in the West, Shell arranged for terminal storage at Pasco and Spokane, Washington, to permit movements between these points via the Salt Lake Pipe Line Company.

Expansion of terminal facilities through erection of new tankage took place over a wide area including Hawaii, California, Washington, Michigan, Indiana and Massachusetts. Lease contracts made during the year covered storage facilities at Cincinnati, St. Paul, Minneapolis and Stamford, Connecticut; terminal facilities at Evansville, Indiana; and land at Paducah, Kentucky. Two underground cavities were leached from salt beds at the Wasson, Texas, Field, to provide storage for propane.

Looking toward the future, Transportation and Supplies in cooperation with Shell's Marketing organization, made an extensive study of land requirements. On the basis of this study, over 100 acres of land were purchased for marine and pipe line terminal development. Purchased for future expansion are sites at Monterey, California; Jackson, Niles, and Grand Haven, all in Michigan; Louisville, Kentucky; and Rensselaer, New York.

Launching of the "Keystoner" and a sister ship, provided increased transportation. Both 18,000-ton vessels, allocated for Shell's transportation service, made their initial voyages in 1953.

Two important developments in products pipe line technology were incorporated in operations during 1953: the component blender and the "measured mile." The blender, feeding the products lines out of Wood River, permits continuous blending of various gasoline components directly into the pipe lines. This Shell "first" eliminates blending tanks and speeds up the operation.

The "measured mile" incorporated in the Wood River-East Chicago and Wolverine Lines, uses a length of pipe line as a measuring tube. A rubber plug is moved through this section between two signal points to give an accurate measure of the quantity of products displaced. This measurement is used to calibrate meters which continuously measure the quantity of all products delivered in and out of products pipe lines.

SHELL CRUDE AND PRODUCTS MOVED IN 1953

Pipe Lines:	Barrels	Change from 1952
Products	55.7 Million	+ 18.0%
Crude and Natural Gasoline	135.2 Million	+ 7.2%
Tankers	90.8 Million	+ 9.5%
Barges	81.9 Million	+ 4.1%
* Tank Cars and "For Hire" Trucks	64.2 Million	+ 3.1%

** Basis: Freight paid by Shell*

MARKETING

Shell Sales Brought in Record Revenues in 1953 Despite Strong Competition and a Plentiful Supply of Petroleum Products

SHELL sales in 1953 were well over a billion and a quarter dollars, topping the record-breaking 1952 figure. These results were achieved in the face of intense competition which reflected the abundant supply of refined products. Prices, which were firm in the first half of the year, softened in the last six months as a result of large product inventories throughout the industry.

In June, domestic consumption of motor fuel reached an all-time high of 115 million barrels per month; in July, Shell introduced Shell Premium Gasoline with TCP, "The Greatest Gasoline Development in 31 Years." The largest and most effective advertising campaign in Company history accompanied the introduction of TCP.

The record campaign made use of newspapers, radio, television, national and trade magazines, outdoor posters, direct mail, station point-of-sale material and customer handout literature. More than 225 newspapers carried TCP advertising, and 58 regularly scheduled radio programs, many hundreds of station-break "spot" announcements, and 23 television stations told the TCP story. About 6,800 outdoor posters were used, along with 30,000 station swivel posters carrying miniature adaptions of the outdoor advertising. Promotional literature was made available in bulk quantities to dealers and special breakfast meetings were held to acquaint dealers with the performance qualities and sales features of Shell Premium Gasoline with TCP.

Customer response was immediate and enthusiastic. Total business at Shell service stations rose sharply along with sales of Shell Premium Gasoline. Average gasoline volume per station advanced to a new

Jutting into San Francisco Bay is a section of the huge San Francisco International Airport, a major terminal for transcontinental and trans-Pacific airplane travel. Shell's marine terminal, shown at top center, serves the airport. New tanks were constructed there last year and further additions are planned for 1954. During 1953, Shell held its lead as the largest supplier of aviation gasoline to United States commercial airlines.

Additional storage facilities were added to the terminal at St. Paul, on the Mississippi River, one of the largest inland water terminals in the U. S. The new facilities shown here will be used for storing packaged goods of all types now moving into St. Paul in large quantities to meet increasing demand.

Under a Shell Premium Gasoline with TCP billboard, Prescott's Shell Servicenter on U. S. Highway 1 at Somerville, Massachusetts, celebrates its grand o changes planned by Shell in 1952 and put into effect in 1953. The gradual introduction of changes in design, rather than radical re-design, has long been

peak, as did sales of tires, batteries and accessories. Motor oil sales climbed also.

Shell's 1953 sales of lubricants reflected a greater increase over 1952 than the estimated seven per cent increase experienced by the industry. Sales of premium quality multi-purpose lubricants continued to expand and the Lubricants Department introduced several new products during the year. These included Shell Engine Conditioning Oil for automobile engines; Shell Alvania Grease A for use on railroad car bearings; and Aeroshell Turbine Oils 1 and 2 to lubricate the engines of jet aircraft.

Fuel oil and liquid petroleum gas sales maintained satisfactory levels in view of the warmer than normal weather last year. Special Products sales increased, and the Company helped meet the continually rising demand for asphalt.

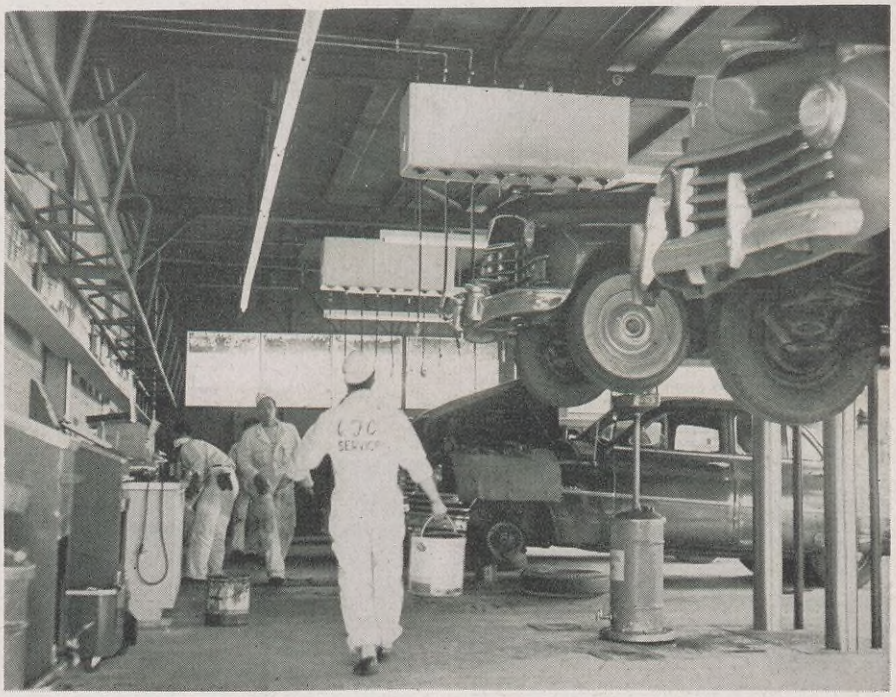
Shell continued to be the nation's number one supplier of aviation gasoline to commercial air lines and all Shell aviation products showed increased sales for 1953. A three-year contract was signed with Eastern Air Lines for $35,000,000 worth of aviation gasoline, with delivery to start in 1954. New maintenance achievements were attained by users of Shell Aviation Lubes; authorization was granted by the Civil Aeronautics Administration to Delta-C&S Air Lines, a Shell customer, to operate its Super-Constellations over the longest interval between overhauls permitted any American carrier.

Marketing Operations continued its expansion program during 1953 to keep up with rising sales and to cut distribution costs. Utilization of new, large-scale storage facilities and more efficient fleet operation reduced average distribution cost to a level below that of 1952. Studies on work methods and procedures carried out at pilot plants, one in each Marketing Division, helped point the way to increased efficiency.

Refinements and service station designs prepared during the latter part of 1952 were used for the first time in 1953. Greater flexibility was introduced, making it possible for Divisions to have tailor-made units to fit individual sites. The new designs also provide for improved storage facilities and better rest rooms.

Additions to bulk product storage were made at many depots and terminals. A new, 165,000-barrel marine terminal was leased and put into service at Escanaba, Michigan, to serve the Upper Peninsula and portions of Wisconsin.

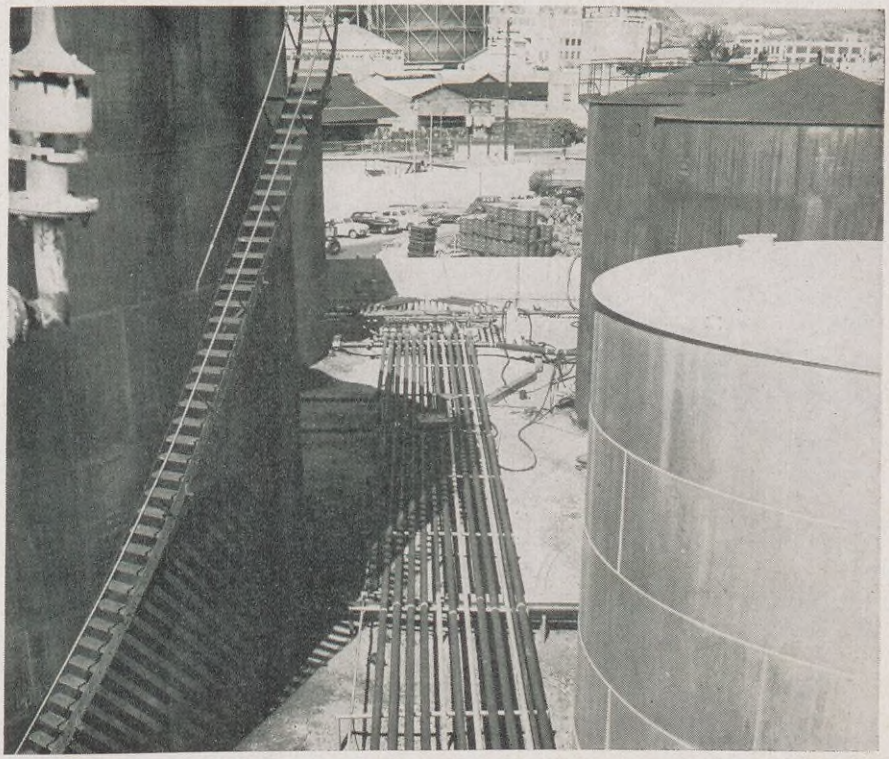
d opening. The station embodies certain design
een Shell's practice in service station architecture.



This busy service bay at a Shell service station was typical of scenes across the nation in 1953. Industry-wide sales of lubricants rose an estimated seven per cent. Sales of Shell's multi-purpose lubricants were even greater, and several new Shell lubricants were introduced to the public.

Large tanks were constructed at Inwood, New York, for storage of jet aircraft fuel, and at Syracuse, New York, for storage of fuel oil and gasoline. Connections to the Buckeye Pipe Line were completed at Syracuse and at Sewaren, New Jersey; at Detroit, a connection was made to the Wolverine Pipe Line. At Honolulu, the extensive terminal reconstruction was essentially completed, as was relocation of plant facilities at Nawiliwili.

A new employee appraisal and development program was initiated in 1953, to help maintain a qualified reserve of prospective candidates for technical, supervisory and management assignments. The program is being installed Division by Division and will be in effect throughout the Marketing Department by the end of 1954.



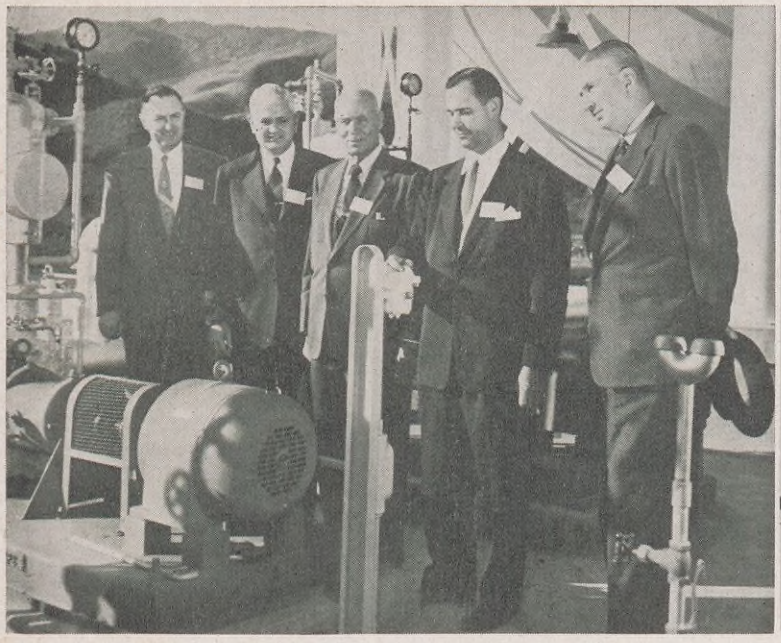
A growing population plus an increase in inter-island and trans-Pacific travel have increased the demand for petroleum products in the Hawaiian Islands. To help meet this demand, Shell increased storage capacity and modernized facilities. New pipe lines and tankage are shown above.

SHELL CHEMICAL CORPORATION

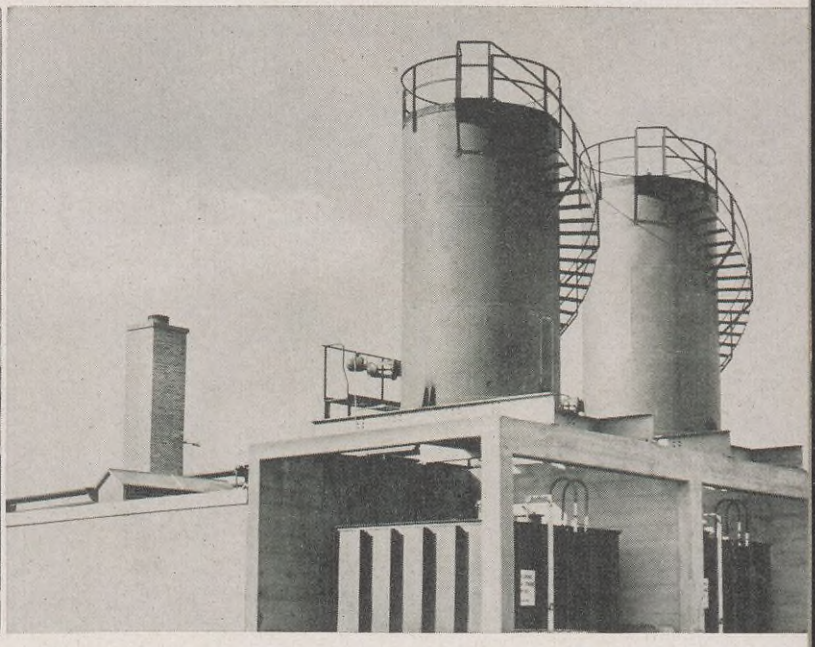
The Company Celebrated Its Twenty-Fourth Year With Broad Construction and Research Programs and Record Sales

WHEN Shell Chemical Corporation put its second Houston EPON plant on stream at the end of 1953, it climaxed another year of steady growth — both in operating facilities and sales. Important new plants were opened in Texas and California and another was placed under construction in Louisiana to help Shell Chemical meet growing chemical demands of U. S. industry and agriculture. New developments in product transportation and handling were other highlights of the year, and the Company's sales volume reached an all-time high. Gross sales income was more than five times greater than it was eight years ago in the first post-war year.

The new EPON facilities tripled Shell Chemical's production of these remarkable resins, and none too soon. These valuable synthetics, used in surface coatings, adhesives and in myriad products ranging from electronic tubes to metal furniture, have been in short supply for some time. A lengthening list of new uses promises to absorb even this new production in short order.



R. C. McCurdy, second from right, named Shell Chemical Corporation President last spring, starts the pump that loads a tank car with the first anhydrous ammonia made at the new plant at Ventura. With him are other Shell Chemical officials and Ventura's Mayor, third from left.

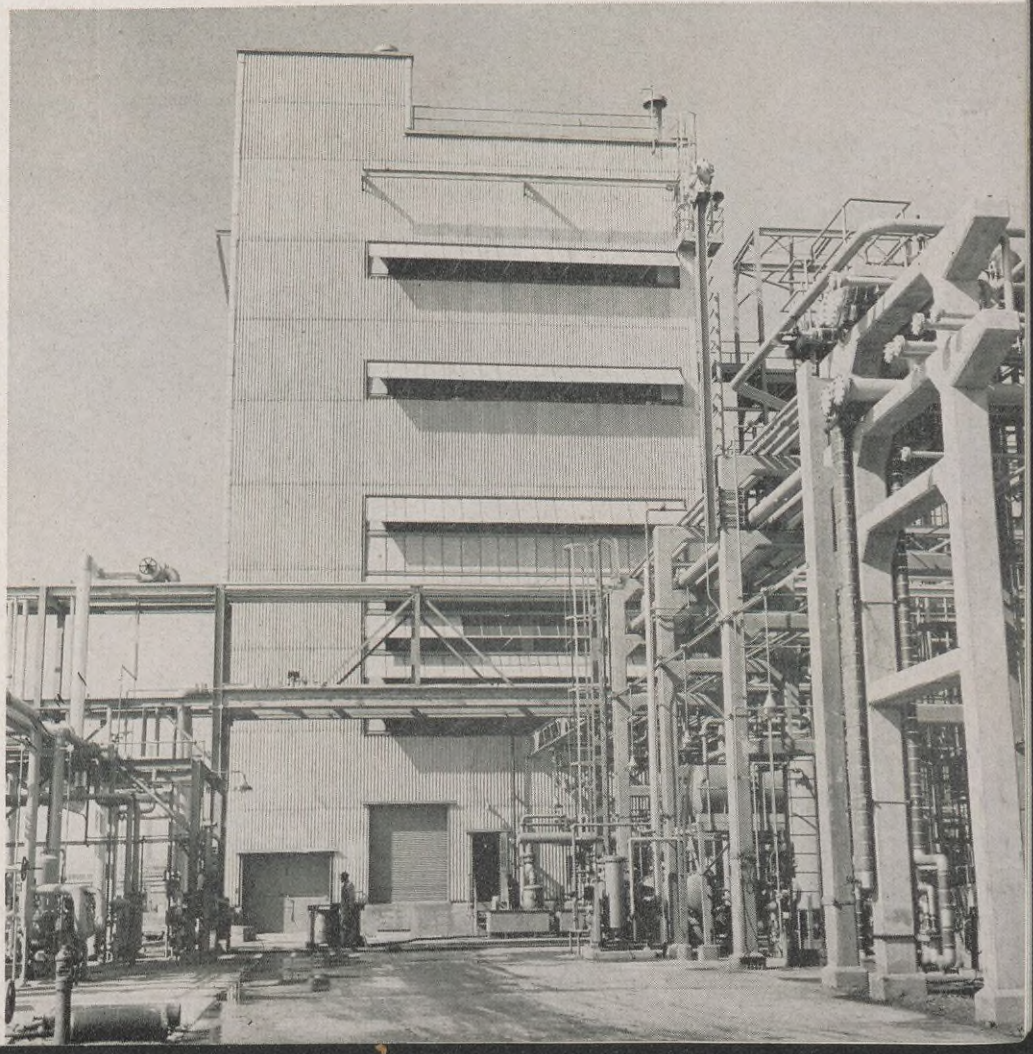


Alcohol denaturing plant, above, was opened at Argo, Illinois, near Chicago. Another Shell alcohol denaturing facility, already operating at Sewaren, New Jersey, for several years, was enlarged during 1953. Sales of denatured alcohol to industry have been increasing steadily.

Two associated 1953 projects made the new EPON plant possible. One was the enlargement of the existing epichlorohydrin plant at Houston early in the year. Epichlorohydrin is one of the chief constituents of EPON. The other major constituent is bisphenol, a product now being made in large quantities by another new Houston unit constructed during the year.

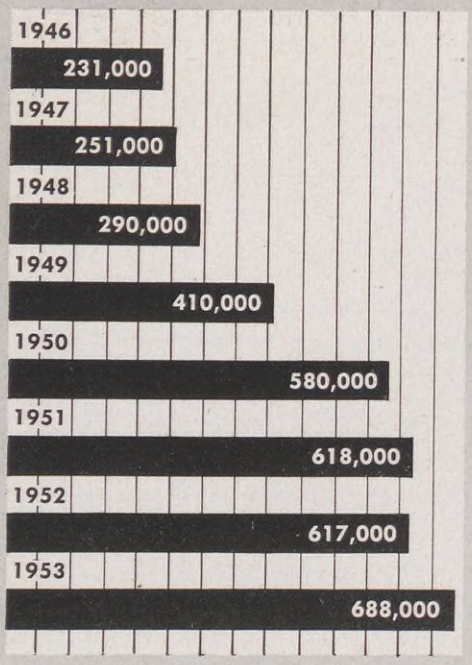
In October 1953, Shell Chemical announced plans for building a new multi-purpose plant in Norco, Louisiana. The new plant, which is now under construction, will be operated on feed stock from Shell Oil's Norco Refinery. In addition to adding to Shell's supply of epichlorohydrin, the plant will help increase production of glycerine by producing one of its components, allyl chloride. Shell Chemical already makes between one-fifth and one-quarter of all the glycerine produced in this country. Important new sales possibilities for the product were opened during 1953 when the United States Government approved the use of Shell Chemical glycerine in foodstuffs.

Shell Chemical's second Houston EPON plant went on stream in 1953, tripling the production of these remarkable resins. A long list of new uses promises to absorb even this new production.



Effect of aldrin on corn rootworms is illustrated above by the two stalks of corn. The healthy roots, at right, are from a row treated with aldrin. The other roots were untreated. Both are from fields where the Missouri Farm Association conducted experiments with soil insecticides.

SHELL CHEMICAL PRODUCTS SOLD
... In Short Tons



Growth of Shell Chemical's production and sales in the last eight years is shown above.

Shell Chemical's continuing interest in agriculture was dramatized in December with the dedication of a new ammonia plant at Ventura, California. This plant increases by 50 per cent the Company's ability to supply nitrogen-rich ammonia fertilizer to western farmers. The plant, which makes 150 tons of the fertilizer a day, supplements Shell's original ammonia plant at Pittsburg, California, and strengthens Shell's position as the largest supplier of nitrogen fertilizers west of the Rockies.

Along with the Ventura Plant, Shell Chemical created a new Ammonia Division effective January 1, 1954, designed to place the manufacture, distribution and sale of this increasingly important product under a single management.

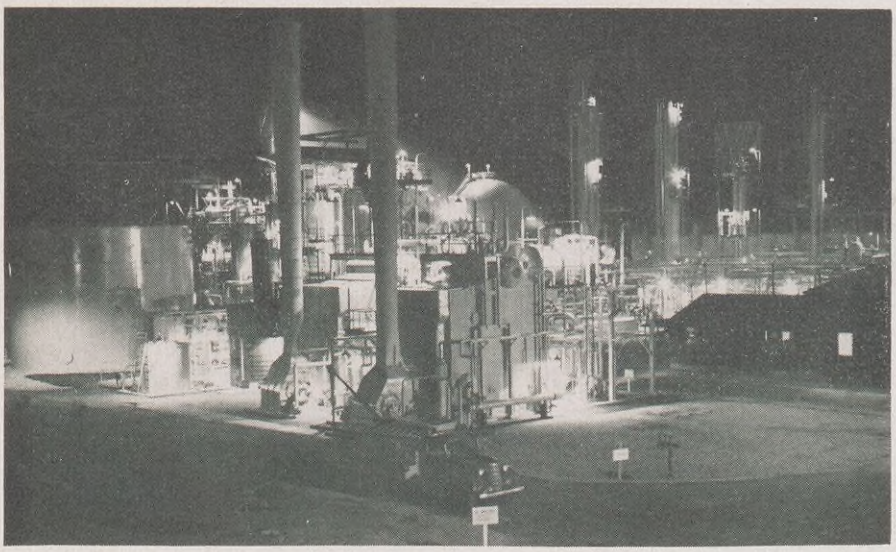
Northwest ammonia users will soon benefit from a unique development in transportation. Shell Chemical announced plans late in 1953 to ship agricultural and industrial ammonia from California over a 900-mile ocean and river route to the growing ammonia markets of Washington and Oregon. Special barges are being designed for the project which will represent America's first bulk shipment of anhydrous ammonia.

In other 1953 steps to improve its distribution facilities, Shell Chemical opened a new terminal at Industry, Pennsylvania to serve the big industrial area around Pittsburgh. An alcohol denaturing plant was also opened at Argo, Illinois, near Chicago and alcohol denaturing facilities at Sewaren, New Jersey, were enlarged.

The Agricultural Chemicals Division put in an active year as grasshopper plagues broke out in California, Texas and Colorado. In each case, the highly effective insecticide, aldrin, was rushed to the rescue. Another insect, the rice leaf miner, put in its first appearance in California in 30 years and threatened to destroy a $75 million rice crop. This time dieldrin, companion insecticide to aldrin, saved the day for the worried farmers. In the Middle West, dieldrin was used effectively against chinch bugs and army worms.

The two insecticides won other im-

A check for chinch bug infestation, right, demonstrates the effectiveness of dieldrin's use on lawns and other grass areas like golf greens.

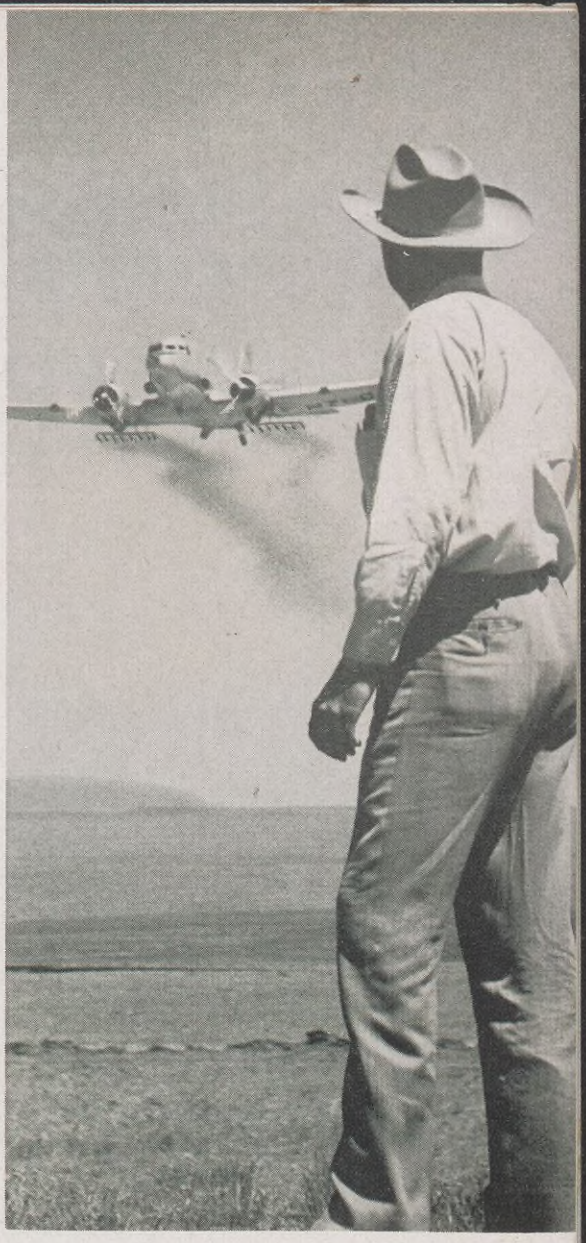


The new Ventura Ammonia plant, above, can produce 150 tons of ammonia per day and increases Shell Chemical's fertilizer output by 50 per cent. Plant went on stream in December.

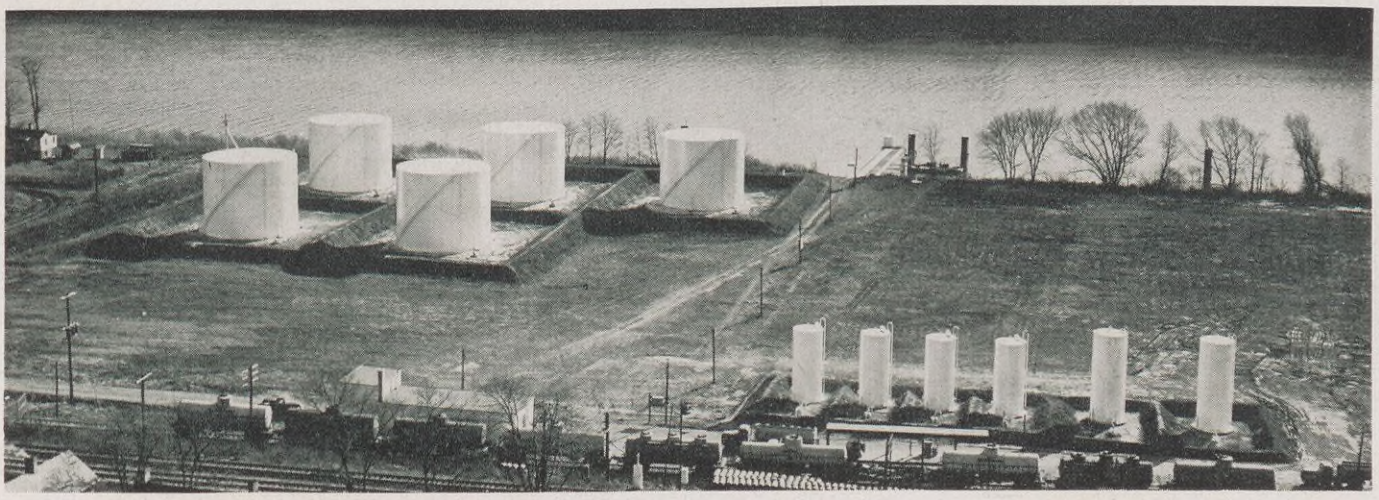
portant battles in 1953. Dieldrin, for example, emerged as a major weapon against many different turf and soil pests that ruin lawns. Aldrin continued its outstanding performance as protector of the American corn crop against the troublesome root worms and other soil insects, a role dramatized in a new Shell Chemical film "Corn's Hidden Enemies." Both products won broadened acceptance for their help in public health work not only in this country but around the world.

Two other insecticides shared the year's honors. Shell Chemical's soil fumigant DD found wider acceptance because of its effectiveness against crop-attacking nematodes. And the newly developed insecticide, endrin, came into its own as a protector of cotton and tobacco crops.

A new building with greatly improved facilities to house the research staff was constructed at Houston. The work of the staff, which serves all Shell Chemical installations, deals with long range studies of plant products and processes. The laboratory itself is fully equipped for investigation into both chemical and physical problems involved in chemical manufacture.



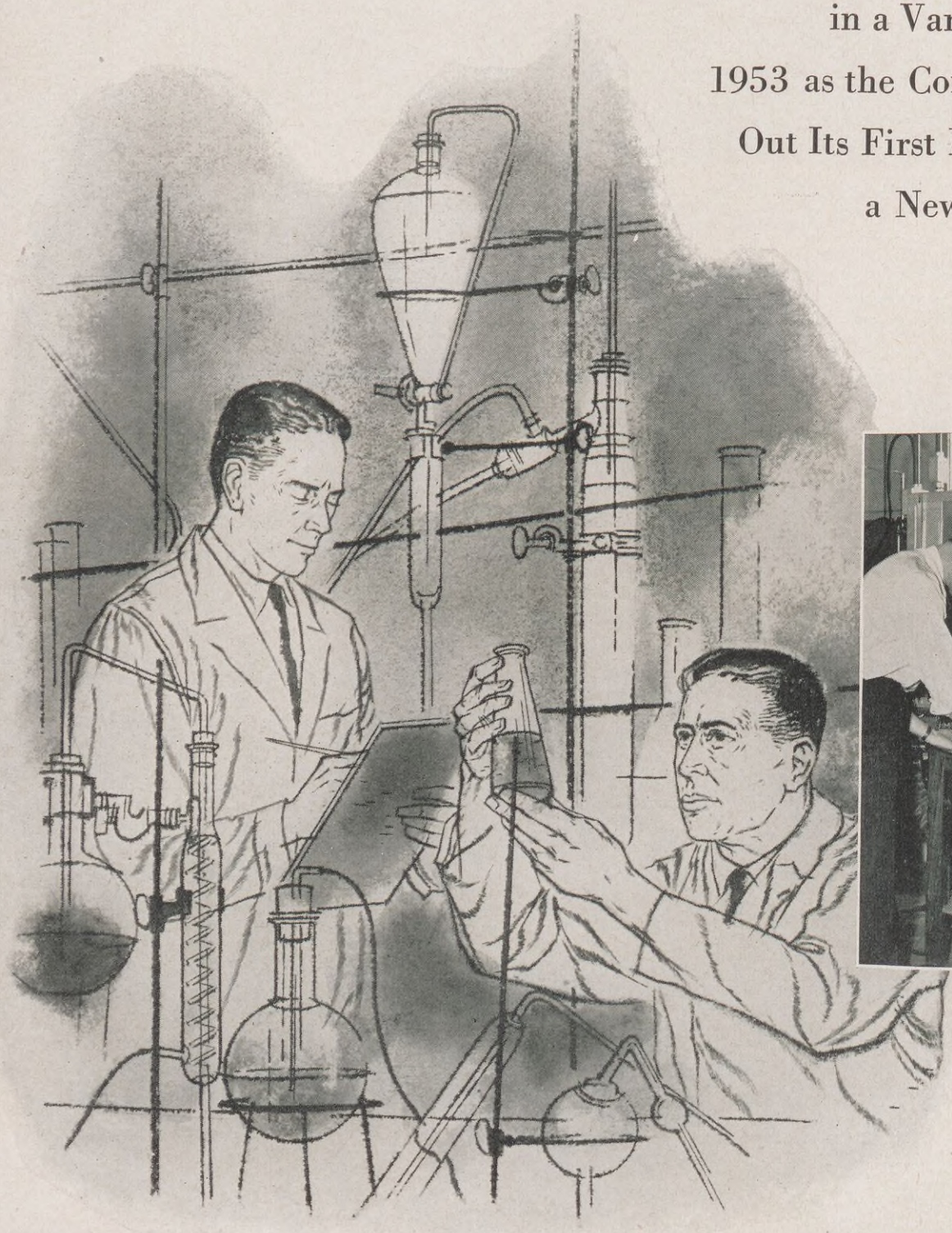
The highly effective insecticide, aldrin, was rushed to several threatened areas last year to fight grasshopper plagues from the air.

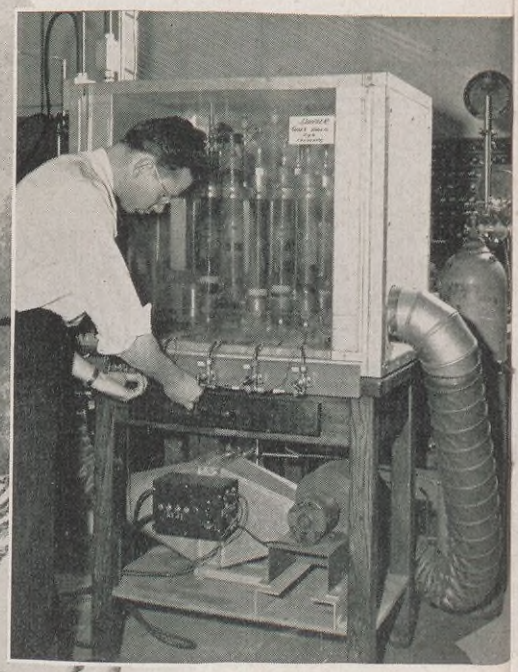


Steps to improve distribution facilities included construction of a new terminal at Industry, Pennsylvania. It will serve the Pittsburgh industrial area.

SHELL DEVELOPMENT COMPANY

Research Advancements Were Noted in a Variety of Fields in 1953 as the Company Rounded Out Its First Full Year Under a New Organizational Pattern





Tensile creep tester, for testing glass plastic laminates, was among new equipment added to the Emeryville Research Center facilities.

THE year 1953 was the Company's first full year under the new organizational arrangement by which exploration and production research and agricultural research became a part of Shell Development Company. Under this new set-up, the Company's Oil and Chemical Research Division, Development and Engineering Division, Patent Division, and Services and Administration Division are located at the Emeryville Research Center in California; the Agricultural Research Division is headquartered in Denver, with laboratories there and in Modesto, California; the Exploration and Production Research Division is located at laboratories in Houston; and the Licensing Division and the Company's Head Office are located in New York City.

New products and processes were announced during 1953 and progress was recorded in many fields. Of particular note were projects dealing with cracking catalysts, with EPON resins, and with automotive and industrial lubricants. Shell Development laboratories added a number of important new kinds of research apparatus, expanded their facilities and also devised new testing and analytical techniques.

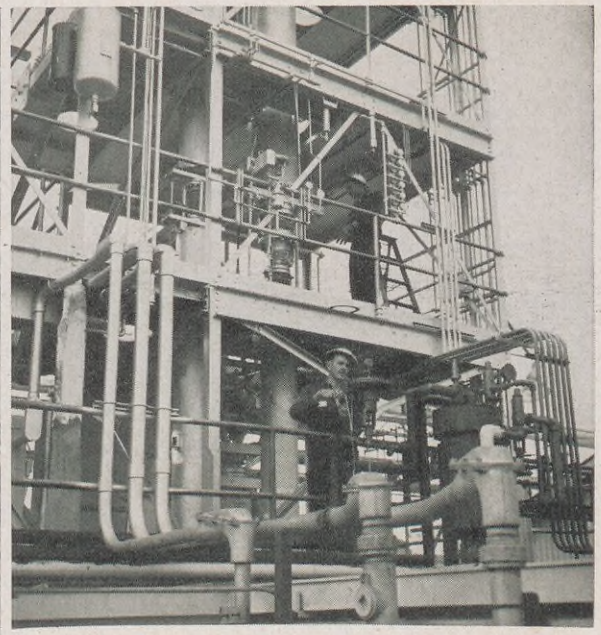
As work continued on cracking catalysts, one new catalyst showed up well in test runs in one of Shell's refineries. Evaluation of this catalyst in tests completed in 1953 seems encouraging and discussions regarding its commercial exploitation are in progress with Shell Oil Company and an outside catalyst manufacturer. In addition, a cracking catalyst test unit—a good size pilot plant—was completed in 1953 at the Emeryville Research Center and will be used to evaluate new catalysts by comparing their behavior with that of other established ones.

Catalytic reforming research, aimed at improving gasoline quality, progressed throughout the year. Shell Development and Shell Oil carried on a joint program which attained a better understanding of hydrocarbon reactions occurring in new catalytic reforming processes such as platforming. As a result of this research, it is expected that a more efficient operation of commercial platforming units will be possible in the future.

New Design For Vacuum Flashers

Shell Development also made a study of the performance of vacuum flashing units, which produce feed stocks for catalytic crackers. The study led to a new design for vacuum flashers, combining a new cyclone design and the use of Turbogrid* distillation trays. The new flasher design is expected to reduce substantially the presence of undesirable metal contaminants in catalytic cracker feed. Tests of the new flasher design got under way early in 1954 at a Shell refinery in Canada, and units with the new design features are under construction at two Shell refineries in the United States. Laboratory tests with flashing and cracking units indicate

** Registered Trademark, U. S. Patent Office*



Pilot plant, above, was completed at Emeryville to test the performance of new and experimental cracking catalysts.

At left, a nematologist at the Modesto Experimental Farm uses a precision injector built in the laboratory for experimental application of new soil fumigants.

that reduction of catalyst contaminants to expected levels will save Shell several million dollars per year in cracking operations.

Numerous other Turbogrid installations were made during 1953 under licensing agreements.

EPON Resins

As a result of a long-term development program carried out by Shell Development, large scale production of Bisphenol-A by Shell Chemical Corporation at Denver was made possible in 1953 and the Houston plant began production of this important industrial chemical early in 1954. Bisphenol-A, called BPA for short, is one of the essential ingredients of many of the EPON resins which Shell Chemical has been producing for the last five years—using purchased BPA.

Cooperative research by Shell Development and Shell Chemical also produced several improvements in the quality and usefulness of EPON. For example, special chemicals are required to catalyze the curing of the resins, and during 1953 a number of new curing agents were developed by the two companies. The use of EPON resins as potting compounds for protecting electrical circuits against damage and deterioration was also formally announced. The process for formulating the superior potting compounds was under study by Shell Development and Shell Chemical for more than two years. In another facet of resin development, pilot plant studies of tertiary-butylbenzoic acid (TBBA) were completed, and commercial production will begin during the year 1954. TBBA is used in alkyd resins to improve hardness, gloss and drying time.

Shell Chemical also began limited commercial production of three other chemicals developed through studies made by Shell Development. They are: Allyl glycidyl ether (AGE), glycerol allyl ether (GAE), and glycidyl phenyl ether (GPE). They have a wide range of uses in the fields of varnishes, plastics and other surface coatings, as well as adhesives, chlorinated rubbers, waxes and solvents.

Improved Lubricants

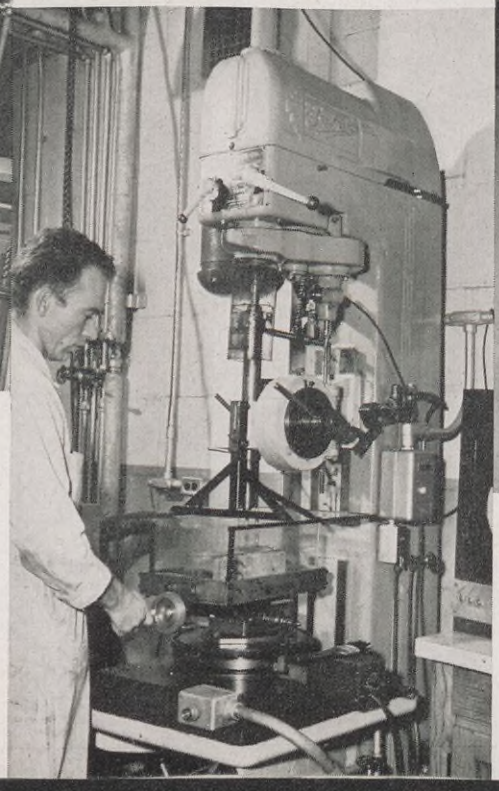
Shell Development brought nearer commercial application a new type of extreme pressure additive for oils used in the rear end differential gears of automobiles. Lubricants containing the additive have been found to have outstanding load carrying abilities and are showing up well in heavy duty tests.

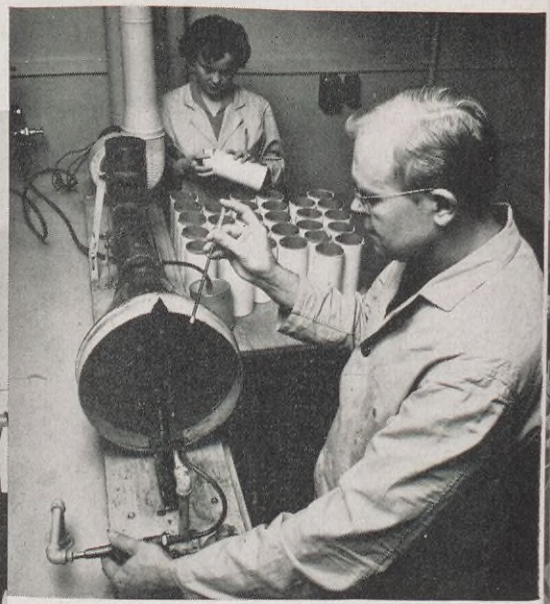
Three metal working fluids were also advanced by Shell Development research. One of them, put on the market by Shell Oil, is a compound for cold drawing bonderized steel tubing, and is an improvement on a previous Shell product. A new oil-base cutting fluid is being field tested in machine shops, and a water-soluble cutting fluid which is useful in a variety of metal working applications has been made available on a limited commercial basis.

In the field of agricultural products, Shell Development research in 1953 brought to light a number of promising compounds, including fungicides, insecticides, herbicides and nematocides. A few of them reached advanced field-testing stages. Others were still under study in the laboratories. As a step in obtaining Food

In exploration and production research at Houston, the model above demonstrates the dual actions of underground water and oil in a five-well system of water flooding.

Shell Development studies advanced the development of three new cutting fluids. Below, while a drill press drills in a block of steel, the effectiveness of one of the fluids is observed.





Houseflies are sprayed with experimental insecticides in the wind tunnel, above, at Denver. Stunned and dead flies are then counted and studied to check the insecticides' effectiveness.

and Drug Administration approval of new insecticides and fungicides, techniques were developed to detect minute traces of poisonous residues in agricultural crops. Means were also found to prevent the decomposition of dieldrin and endrin, two Shell insecticides, which had caused difficulties in certain powder formulations.

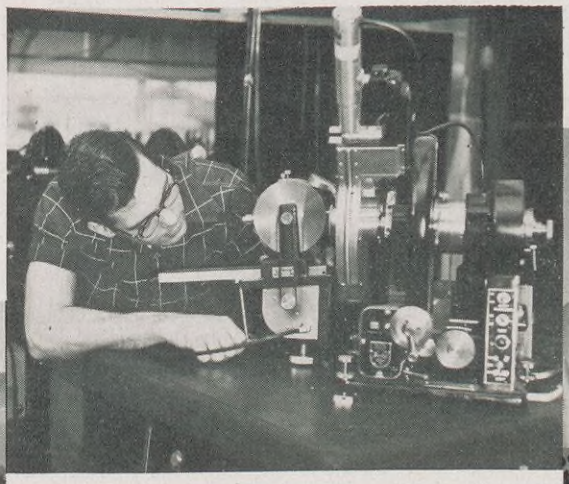
A significant portion of the year's work in the fields of exploration and production was devoted to studies leading to a better understanding of the properties and behavior of the rocks and fluids which make up the earth's crust. The work included investigations of the propagation of elastic waves in the earth; the movement of fluids in the earth; the age, origin and subsequent change in sediments; the elastic, plastic and brittle deformations of the earth; and the origin of petroleum. Other studies were aimed at putting the information obtained to use in the business of finding and producing oil and gas. In this connection, a number of laboratory developed theories and techniques were tested under field conditions in cooperation with Shell Oil's Exploration and Production organization.

At an Open House, observed at the Emeryville Research Center on November 18, more than 4,000 persons celebrated Shell Development's 25th anniversary and viewed many exhibits.

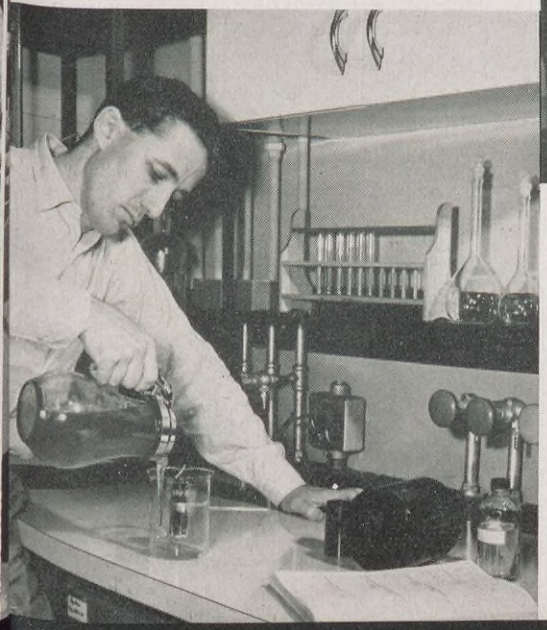
In addition, work advanced in 1953 on the development of new and improved equipment for making measurements at the earth's surface which will tell the structure and type of rocks lying far below, and for making measurements in boreholes to determine the physical and chemical properties of rocks and fluids in the earth's formations.

At about the time Shell Development was nearing completion of its first full year under its new organizational set-up, the Company was also rounding a quarter-century of growth. On November 18, the Company's twenty-fifth anniversary was celebrated at an Open House held at the Emeryville Research Center. More than 4,000 persons, including employees, their families and friends, attended the celebration, viewing demonstrations and exhibits.

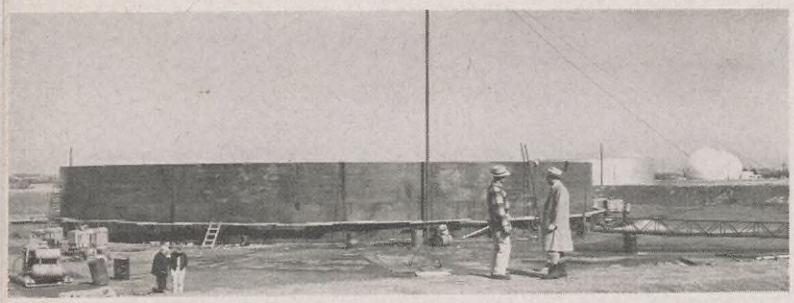
The Exploration and Production Research Division uses this photo-X-ray unit to identify and photograph minute clay minerals used in drilling muds.



Below, a chemist at Emeryville pours a new EPON resin potting compound around a radio tube preparatory to solidifying the protective material. Potting compound took four years to develop.



Electronic computing machines, like the one shown at right in the Numerical Analysis Laboratory, hastened complex calculations relating to many research projects.



In 1953, construction was begun on two 120-000-barrel oil storage tanks at Shell Pipe Line Corporation's Cushing, Oklahoma, tank farm.

SHELL PIPE

The Corporation Strengthened Its
Common

SHELL Pipe Line Corporation moved more crude oil and products in 1953 than ever before, due in large part to the added throughput provided by the newly completed Rancho Pipe Line System. The Rancho, a multiple-ownership line, is the biggest single project in the Corporation's history. Shell Pipe Line designed, constructed and now operates the 24-inch crude oil line which stretches 455 miles from McCamey in West Texas to the Houston area.

In the last 10 months of 1953, the Rancho moved more than 48 million barrels of crude oil into Gulf Coast refineries, including 20 million barrels for Shell Oil Company. Shell Pipe Line has sold all but a small part of its wholly-owned, 10-inch line which roughly parallels the Rancho and which has been in service since 1929.

In February, oil began flowing through the Sterling Pipe System, another jointly-owned project running from Merino, Colorado to Gurley, Nebraska. Shell Pipe Line owns a one-third interest in this 10 and 12-inch line which provided the Corporation with 13,000 barrels additional daily capacity by the end of the year.

Late in 1953, Shell Pipe Line officially recognized the growing poten-

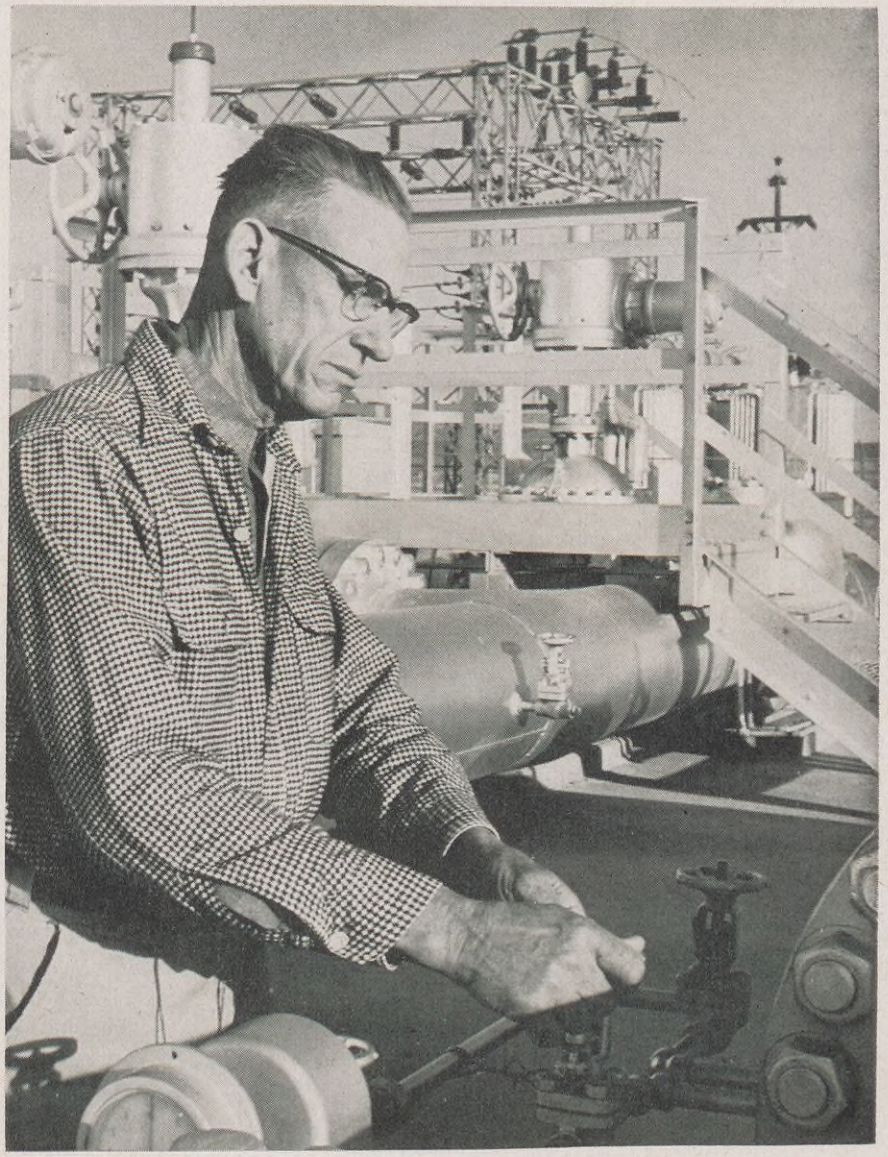
The Sterling Pipe Line, shown here under construction, went into operation last year. The crude oil line, of which Shell is part owner, connects Merino, Colorado, and Gurley, Nebraska. At the latter town, it joins the Platte Pipe Line Company system which runs east to Wood River, Illinois.

LINE CORPORATION

Position As One Of The Nation's Leading Oil Carriers In 1953 And Achieved A Record Throughput

tial of Colorado's Denver-Julesburg Basin by establishing a new Division with headquarters in Denver and taking over active operation of all Shell gathering lines in the area. Previously, outside contractors operated these lines for Shell.

The Corporation's facilities for handling crude oil in other areas also improved last year. In West Texas, Shell Pipe Line purchased feeder lines in six oil fields and constructed an additional 128,000 feet of gathering lines. These moves increased the crude receipts of the Wasson Gathering System by approximately 7,000 barrels per day. Also, it was necessary to



Station Engineer C. J. Almquist, at the Mesa Station of the Rancho Pipe Line, checks the temperature and pressure of crude oil pumped from the tank farm to the station at the rate of 9,000 barrels per hour. The huge new Rancho System began operations in February, 1953.

construct an 8-inch line from TXL 23 miles northeastward to the Midland Farms Field near Andrews, Texas.

At Cushing, Oklahoma, site of its Mid-Continent Area headquarters, Shell Pipe Line started the reconditioning of seven 80,000 barrel tanks and began construction of two 120,000 barrel storage tanks to provide additional space for incoming crude oil. The expanded tank farm serves both the Basin and Ozark Systems, two multiple-ownership pipe lines. The Basin System moves crude oil from West Texas to Cushing, Oklahoma; the Ozark from Cushing eastward to Shell Oil's Wood River Refinery and other Midwest refineries.

Two other 1953 projects created considerable interest throughout the industry. One took place at the Houston Ship Channel, the busy waterway that links the city with the Gulf of Mexico. Shell Pipe Line had the job of laying seven pipe lines underneath the 2500-foot wide channel without blocking traffic. All seven lines were pulled across the channel at the same time—the first such crossing ever accomplished in the United States. Two of the lines were for the Bayou Pipe Line System, a Shell-operated multiple ownership products line extending from Baytown, Texas to Baton Rouge, Louisiana, where it feeds into the Plantation Pipe Line System.

The second project was the inauguration of an economic study by Shell Pipe Line on the feasibility of building a pipe line outlet from the Williston Basin. This study, underwritten by a group of Williston Basin operators, will continue into the spring of 1954, when findings will be presented to the interested parties.

Plans to build a 65-mile, 12-inch products line from Shell's Norco Refinery to the Maryland Tank Farm of the Plantation Pipe Line Company near Baton Rouge were announced late in the year. Shell Pipe Line will design, construct and operate the new line. Field construction is scheduled to begin about April 1, 1954.

The tank farm pictured above at McCamey, Texas, is a storage point for crude oil gathered in West Texas. It serves both the Rancho Pipe Line System, which runs east to the Houston area, and Shell Pipe Line's wholly-owned 10-inch line which runs northeast to supply the Wood River Refinery.

Statement of

FINANCIAL CONDITION

SHELL OIL COMPANY AND SUBSIDIARY COMPANIES

DECEMBER 31, 1953

WE OWN

CURRENT ASSETS

Money in offices and banks		$ 52 million
U. S. Government securities (less those set aside to pay federal income taxes)		37 million
Due from customers and affiliated companies		113 million
Inventories—crude oil, refined products, materials and supplies		160 million
TOTAL CURRENT ASSETS		362 million
PROPERTIES, PLANT AND EQUIPMENT		
Drilling and production		793 million
Refineries and plants		494 million
Transportation		169 million
Marketing and other		185 million
TOTAL PROPERTIES, PLANT AND EQUIPMENT		1,641 million
Less depreciation, depletion and amortization		1,076 million
NET PROPERTIES, PLANT AND EQUIPMENT		565 million
OTHER ASSETS		58 million
TOTAL ASSETS		$985 million

WE OWE

CURRENT LIABILITIES

Owed to suppliers and others		$137 million
Owed for taxes	$ 97 million	
Less U.S. Government securities held for payment of federal income taxes	64 million	33 million
TOTAL CURRENT LIABILITIES		170 million
BORROWED MONEY		143 million
TOTAL LIABILITIES		313 million
SHAREHOLDER'S INVESTMENT		
Capital	$236 million	
Earnings employed in the business	436 million	
TOTAL		672 million
TOTAL LIABILITIES AND SHAREHOLDERS' INVESTMENT		$985 million

FOR YOUR INFORMATION: Copies of the Shell Oil Company Annual Report for 1953 are available for employees. If you would like a copy, ask your supervisor for one and he will arrange to get it for you.

THE financial aspects of the activities described on the preceding pages are summarized in Shell's Statement of Financial Condition and Income Statement. These statements, which are included in the Company's Annual Report to Shareholders, are reproduced above and on the next page in abbreviated form.

The former shows what the Company *owned* and what it *owed* at December 31, 1953, while the latter is a summing up of the year's business.

What we owned increased $96 million during the year to $985 million. Working capital of $192 million, represented by the excess of current assets over current liabilities, continued to reflect a strong position.

$238 million—$32 million more than last year—of additions to properties, plant and equipment resulting from the expansion program, brought their gross value to more than $1.6 billion dollars.

INCOME STATEMENT

WHAT CAME IN

From customers and others.....	**$1,282** million

WHAT WENT OUT

To suppliers for goods and services....	**689** million
To more than 34,000 Shell employees for wages, salaries and benefits.....	**218** million
Towards replacement of plant, equipment and crude oil underground.....	**154** million
Direct taxes—federal, state and local..	**102** million
Interest on borrowed money.....	**4** million

WHAT WAS LEFT

Profits from the year's business.....	**115** million

DIVIDED AS FOLLOWS

Cash dividends to the more than 17,600 shareholders who invested their money in the Company.....	**41** million
Retained earnings employed in the business.....	**74** million

The Income Statement, above, shows that receipts from customers and others exceeded one billion dollars for the third consecutive year reaching a new peak of $1,282 million, an 11 per cent increase over 1952. Operating Charges rose 10 per cent over 1952 which was due principally to increases in salaries and wages, higher costs and the heavy drilling program.

Earnings from the year's business after all expenses were $115 million. These earnings were divided as follows: Cash dividend payments to shareholders were the same as the year before—$3.00 per share. This amounted to $41 million. (A 2 per cent stock dividend was also distributed in 1953.) The remaining $74 million, or 64 per cent of earnings, was retained in the business to help finance Company expansion.

For the more than 34,000 Shell employees, $218 million was paid as wages, salaries and benefits. Service and family allowances as applicable were continued for 604 employees on military leave. During the year, 313 employees retired on pensions, bringing the total number of pensioners to 2,570.

Service Birthdays

Thirty-Five Years

J. J. DOOLING
Wood River Refy.
Engineering

M. C. F. GRAEBER
Wilmington Refy.
Alkylation

Thirty Years

W. T. BROWN
New Orleans Area
Gas

E. H. CHEESEMAN
Pacific Coast Area
Production

J. S. GILBERT
Tulsa Area
Purchasing-Stores

W. E. GRIFFIN
Sacramento Div.
Sales

A. L. HORRELL
Pacific Coast Area
Gas

D. KALB
Indianapolis Div.
Sales

G. E. KEISTER
Chicago Div.
Sales

E. J. KING
Tulsa Area
Production

C. D. LEE
Tulsa Area
Production

H. I. LOUNSBURY
Martinez Refy.
Lubricating Oils

K. L. MALCOLM
Sacramento Div.
Marketing Service

W. M. MARTIN
San Francisco Div.
Sales

K. R. McBANE
Pacific Coast Area
Treasury

L. M. MOTTIER
Wilmington Refy.
Engineering

F. L. NUTTING
Martinez Refy.
Cracking

D. T. PERRETT
Denver Area
Treasury

U. C. SCHOLL
Wilmington Refy.
Dispatching

F. U. SHUBERT
Wilmington Refy.
Engineering

F. W. SWANZY
Sacramento Div.
Treasury

H. R. P. THOMPSON
Sacramento Div.
Operations

J. R. URTASUN
Pacific Coast Area
Production

L. W. VANCE
Tulsa Area
Production

D. W. WISE
Tulsa Area
Land

E. W. WRIGHT
Tulsa Area
Production

H. F. ZIEGLER
Shell Pipe Line Corp.
Head Office

Twenty-Five Years

R. BAILLIE
Sacramento Div.
Operations

C. E. BAUMGARDNER
Martinez Refy.
Engineering

J. BERVER
Houston Refy.
Engineering

J. F. BISHOP
Houston Refy.
Utilities

B. C. BLACK
Houston Area
Land

R. S. BONNER
Martinez Refy.
Distilling

C. R. BROCKMEYER
Houston Refy.
Engineering

W. H. BRUCE
Martinez Refy.
Control Lab.

Twenty-Five Years (Cont'd)

R. L. BUCKLES
Minneapolis Div.
Sales

E. J. BURNS
New York Div.
Operations

C. H. CAPEN
Wilmington Refy.
Control Lab.

H. C. CHARTER
San Francisco Div.
Marketing Service

W. J. CHRISTESON
Wood River Refy.
Control Lab.

W. H. CLEMMONS
Pacific Coast Area
Production

A. G. CROW
Pacific Coast Area
Production

J. J. DAVIS
Minneapolis Div.
Operations

M. C. DOBSON
Products Pipe Line
Birmingham, Ala.

W. W. DONEHOO
Houston Refy.
Gas

R. E. DORAN
Pacific Coast Area
Production

J. S. DRAIS
San Francisco Office
Marketing

D. EATON
Pacific Coast Area
Production

T. H. EDMISTON
Houston Refy.
Engineering

F. FARLEY
Boston Div.
Marketing Service

J. A. FRASER
New York Div.
Sales

B. A. FROLOV
Shell Development Co.
Head Office

A. B. FRY
Tulsa Area
Production

J. H. HAMILTON
Indianapolis Div.
Real Estate

J. R. HAMILTON
Wood River Refy.
Distilling

W. M. HARRIS
Seattle Div.
Treasury

H. A. HARWOOD
Atlanta Div.
Treasury

F. J. HAYES
Washington, D. C.
Administrative

J. HEANEY
Shell Development Co.
Emeryville

F. G. HEMINGHAUS
Atlanta Div.
Operations

R. C. JOHNSON
Wood River Refy.
Engineering

O. H. KOLLOCK
New York Div.
Sales

S. F. KONZEN
Shell Chemical Corp.
Houston Plant

O. C. LANGLEY
Norco Refy.
Engineering

N. J. LOYET
St. Louis Div.
Operations

F. H. MEYER
St. Louis Div.
Marketing Service

A. K. MILLS
Wilmington Refy.
Technological

D. W. MUCKLE
Boston Div.
Sales

J. C. NICHOLS
Tulsa Area
Gas

R. J. NICHOLS
Portland Div.
Operations

J. NIERHAKE
Martinez Refy.
Economics & Sched.

C. D. NIETHAMMER
Detroit Div.
Sales

C. M. NOEL
Wilmington Refy.
Effluent Cont. & Util.

E. A. NORDSTORM
Wood River Refy.
Engineering

A. M. OSE
Seattle Div.
Operations

D. R. PEDERSEN
San Francisco Div.
Treasury

F. O. POWELL
Shell Pipe Line Corp.
Texas-Gulf Area

J. F. PRESNAL
Sewaren Plant
Terminal

H. A. RINK
St. Louis
Purchasing-Stores

R. C. ROBINSON
Atlanta Div.
Sales

H. A. ROGERS
Tulsa Area
Production

F. P. SANTORA
New York Div.
Operations

L. SCALES
Wilmington Refy.
Compounding

R. SCHALLER
Shell Chemical Corp.
Shell Point Plant

L. M. SCOTT
St. Louis Div.
Treasury

D. B. SETTY
Pacific Coast Area
Production

H. A. SOUMAN
New Orleans Div.
Marketing Service

R. M. STEARNS
Portland Div.
Personnel

K. R. STOKER
Portland Div.
Sales

Twenty-Five Years (Cont'd)

B. W. STONE
Wood River Refy.
Engineering

L. E. STOVALL
Shell Pipe Line Corp.
Texas-Gulf Area

K. M. STURGES
Baltimore Div.
Treasury

L. L. SWANSON
Seattle Div.
Operations

A. M. TALLANT
Midland Area
Production

L. F. THALE
Indianapolis Div.
Treasury

R. P. THOMPSON
Los Angeles Div.
Sales

H. T. TOLLESEN
Portland Div.
Treasury

F. B. TRAW
Shell Pipe Line Corp.
Mid-Continent Area

D. J. TRICHE
Norco Refy.
Engineering

C. H. VAN HEES
Norco Refy.
Stores

L. B. WALKER
Wilmington Refy.
Control Lab.

D. F. WANGLER
St. Louis Div.
Treasury

W. L. WILLIAMS
Norco Refy.
Engineering

E. J. WOOD
Seattle Div.
Sales

R. G. YOUNG
Shell Pipe Line Corp.
West Texas Area

SHELL OIL COMPANY

Head Office

20 Years

S. B. Kieselhorst . . . Transportation & Supplies
G. J. Ruesch . . . . . Marketing

15 Years

G. J. Chinsley . . . . . Marketing

10 Years

Susan M. Gallo . . . . . Financial
Alice M. Hanke . . . . . Financial

San Francisco Office

20 Years

G. B. Ruffing . . . . . Transportation & Supplies

Exploration and Production

TECHNICAL SERVICES DIVISION (HOUSTON)

10 Years

R. L. Parker . . . . . Exploitation Engineering

HOUSTON AREA

20 Years

W. Kendrick . . . . . Production
F. J. Underwood . . . . . Land
F. H. Warner . . . . . Production

10 Years

W. R. Hudgins . . . . . Production
O. B. Manes . . . . . Exploration
I. S. Martin . . . . . Land
W. A. O'Neal . . . . . Production

MIDLAND AREA

10 Years

N. J. Costin . . . . . Production

NEW ORLEANS AREA

20 Years

J. A. Gaspard . . . . . Production
M. L. Johnston . . . . . Production
J. L. Moore . . . . . Exploration

15 Years

C. Legrande . . . . . Production

10 Years

J. J. Becnel . . . . . Production
E. Benoit . . . . . Production
M. S. Doucet . . . . . Production
N. B. Duke . . . . . Production
R. J. Giroir . . . . . Production
E. W. Green . . . . . Treasury
B. F. Madole . . . . . Land
J. A. Wells . . . . . Production

PACIFIC COAST AREA

20 Years

J. H. Bullock . . . . . Production
J. T. Carney . . . . . Production
H. W. Hewston . . . . . Production
W. S. Landis . . . . . Transp. & Supplies
B. A. Thompson . . . . . Purchasing-Stores
G. E. Thouvenel . . . . . Production

15 Years

C. E. Clifton . . . . . Production

10 Years

E. M. Bariffi . . . . . Gas
J. E. Chavez . . . . . Purchasing-Stores
O. F. Howard . . . . . Production
Lillian M. Molidor . . . . . Land
J. V. Moore . . . . . Production
A. L. Onopa . . . . . Production
J. W. Watson . . . . . Production

TULSA AREA

20 Years

R. E. Jarrett . . . . . Treasury
W. B. Upchurch . . . . . Production

15 Years

C. F. Dye . . . . . Production
C. R. Scott . . . . . Production
P. L. Wetzel . . . . . Production

10 Years

R. E. West, Jr. . . . . Production

Manufacturing

HOUSTON REFINERY

20 Years

J. Casas . . . . . Control Lab.
A. B. McCormick . . . . . Engineering
I. D. McMillian . . . . . Automotive

15 Years

A. W. Fields ..... Engineering
R. Tucker ..... Control Laboratory

10 Years

J. Edwards ..... Engineering
J. J. Oliver ..... Engineering
J. T. Stone ..... Engineering
J. C. Woods ..... Engineering

MARTINEZ REFINERY

20 Years

R. W. Crowson ..... Engineering
L. Gardenhire ..... Cracking
G. J. McSorley ..... Lubricating Oils

15 Years

A. M. Dacorte ..... Engineering
H. E. Hook ..... Control Laboratory
N. Matta ..... Engineering
W. K. Skidmore ..... Research Laboratory

NORCO REFINERY

20 Years

S. J. Oertling ..... Technological

10 Years

H. Barrient ..... Engineering
G. Generose ..... Engineering
S. B. Heurtin ..... Engineering
P. Schexnayder ..... Engineering

WILMINGTON REFINERY

15 Years

J. R. McCormick ..... Engineering
J. M. Tharp ..... Fire & Safety

10 Years

P. M. Braden ..... Engineering
T. M. Fenton ..... Control Laboratory
V. P. Hayes ..... Engineering
F. Herstine ..... Engineering

WOOD RIVER REFINERY

20 Years

M. W. Goth ..... Compounding
J. Spudich ..... Treating

15 Years

R. F. Ash ..... Treasury
O. L. Bond ..... Engineering
J. H. Bryant ..... Engineering
A. A. Burress ..... Cracking
T. K. Carpunky ..... Engineering
F. G. Doyen ..... Engineering
H. T. Duncan ..... Engineering
P. B. Dvorchak ..... Engineering
W. M. Landers ..... Engineering
H. K. McConathy ..... Treasury
M. Scherrer ..... Engineering
H. D. Steelman ..... Control Laboratory
C. R. Worthy ..... Control Laboratory

10 Years

E. L. Barnett ..... Engineering
C. H. Dale ..... Engineering
A. L. Johnson ..... Engineering
J. L. Klinke ..... Engineering
H. H. Miller ..... Engineering
J. I. Smith ..... Dispatching
G. W. G. Underwood ..... Engineeirng
A. J. Wild, Jr. ..... Cracking
H. G. Wilson ..... Lubricating Oils

Marketing

MARKETING DIVISIONS

20 Years

D. J. Creagan ..... Albany, Treasury
R. A. Ramaker ..... Chicago, Sales
G. L. Wulff ..... New Orleans, Treasury
J. A. Dowd ..... New York, Operations
C. L. Brandsasse ..... St. Louis, Treasury
P. J. Liesmann ..... St. Louis, Operations
W. S. Piper ..... San Francisco, Sales
H. C. Schulz ..... San Francisco, Operations
E. J. Cowing ..... Seattle, Sales

15 Years

J. A. Hillman ..... Boston, Sales
E. G. Boynton, Jr. ..... Los Angeles, Sales
A. J. Hansen ..... Los Angeles, Sales
M. K. Hunsicker ..... Los Angeles, Operations
H. D. McVay ..... Los Angeles, Sales
R. B. Wise ..... Los Angeles, Sales
A. Zambas ..... Los Angeles, Sales
R. J. Crawford ..... Portland, Operations
J. B. Dunigan ..... Portland, Operations
A. J. Matson ..... Portland, Operations
Z. R. Teters ..... Portland, Operations
R. L. Juergenson ..... Sacramento, Sales
T. Philippi ..... Sacramento, Operations
L. G. Tinney ..... Sacramento, Operations
D. L. Heggie ..... San Francisco, Mktg. Serv.
N. A. Indahl ..... San Francisco, Mktg. Serv.
A. G. Berglund ..... Seattle, Operations

10 Years

R. C. Chase ..... Baltimore, Sales
J. C. Hinkle ..... Chicago, Sales
N. Ladas ..... Chicago, Operations
B. L. Cain ..... Los Angeles, Operations
Ruth F. Danielson ..... Los Angeles, Treasury
R. R. Johnson ..... Portland, Sales
S. W. Thompson ..... Seattle, Operations

SEWAREN PLANT

20 Years

M. Foldi ..... Compounding
J. A. Hmieleski ..... Depot
J. Kopi ..... Compounding

10 Years

W. Sabo ..... Engineering & Maintenance

Products Pipe Line

20 Years

G. H. Gellersen ..... East Chicago, Ind.

15 Years

K. E. Redmond ..... Lima, Ohio

SHELL CHEMICAL CORPORATION

20 Years

V. L. Keldsen ..... San Francisco
L. E. Davis ..... Dominguez
F. R. Curtiss ..... Houston
A. A. Brusatory ..... Martinez
E. W. Casagrande ..... Martinez
F. D. Kuenzly ..... Ventura

10 Years

W. W. Hollifield ..... Houston
F. H. Brooke ..... Shell Point
Evelyn M. Nemetz ..... San Francisco

SHELL DEVELOPMENT COMPANY

20 Years

M. L. Caldwell ..... Emeryville
S. F. Chappell ..... Houston
J. F. Fidiam ..... Emeryville
H. J. Henriques ..... Emeryville
Elizabeth M. Nutting ..... Emeryville
R. R. Ward ..... Emeryville
P. S. Zucco ..... Emeryville

10 Years

Marion H. Berrie ..... Emeryville
H. H. Brown ..... Emeryville
Edith R. Dugle ..... Emeryville
Jean E. Locke ..... Emeryville
A. E. Perry ..... Houston
S. D. Siegel ..... Emeryville
R. W. H. Tess ..... Emeryville

SHELL PIPE LINE CORPORATION

20 Years

W. Hale, Jr. ..... West Texas Area
J. R. Hood ..... Texas-Gulf Area
L. T. Kirklen ..... West Texas Area
V. H. Lee ..... Mid-Continent Area
R. E. Mebane ..... Texas-Gulf Area
J. J. Sonnier ..... Head Office

15 Years

H. H. List ..... Head Office
W. R. Ward ..... West Texas Area

10 Years

L. F. Franklin ..... West Texas Area

matters of *Fact*

FOR YOUR FUTURE

The new refinery to be constructed at Anacortes, Washington, is an example of long-term planning to keep Shell in a strong competitive position. Such planning resulted in the expenditure, during 1953, of $237,712,000 in the search for new oil and gas reserves and the construction and modernization of plants, pipe lines, service stations and other facilities. Comparable expenditures are planned for this year and 1955 — to keep the Company healthy and jobs secure.

SHELL OIL COMPANY
50 West 50th Street
NEW YORK, N. Y.
RETURN POSTAGE GUARANTEED

J. W. Stephens
4710 Bell St., Apt. 1
Houston 23, Texas

SCC

New Peak

Income from the sale of Shell products last year hit a new high of more than one billion two hundred and fifty million dollars—a figure which speaks well not only for the quality of Shell products and service, but also for the able and enthusiastic teamwork by all members of our organization.