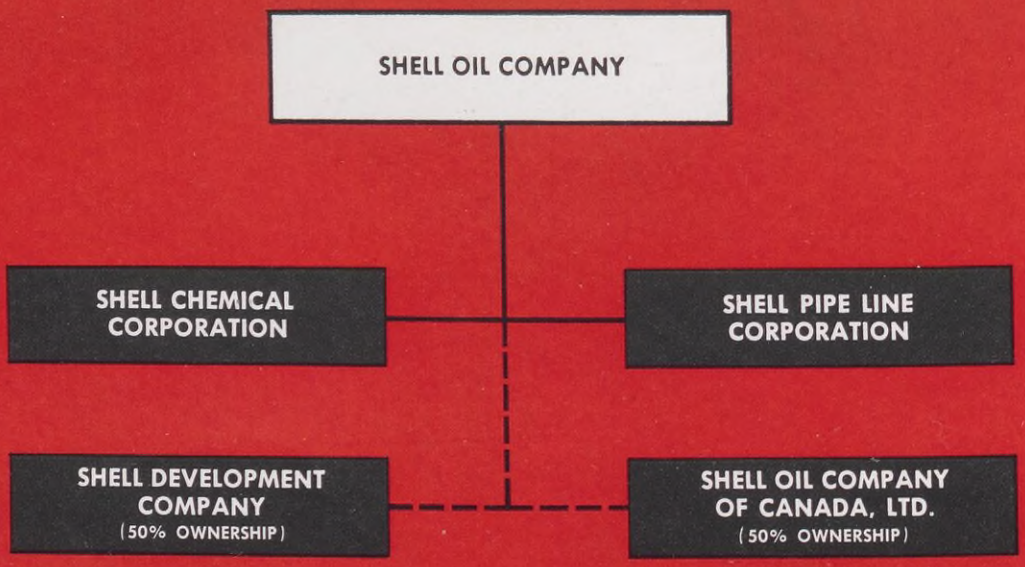
SHELL NEWS

SEPTEMBER 1949

THE NEW



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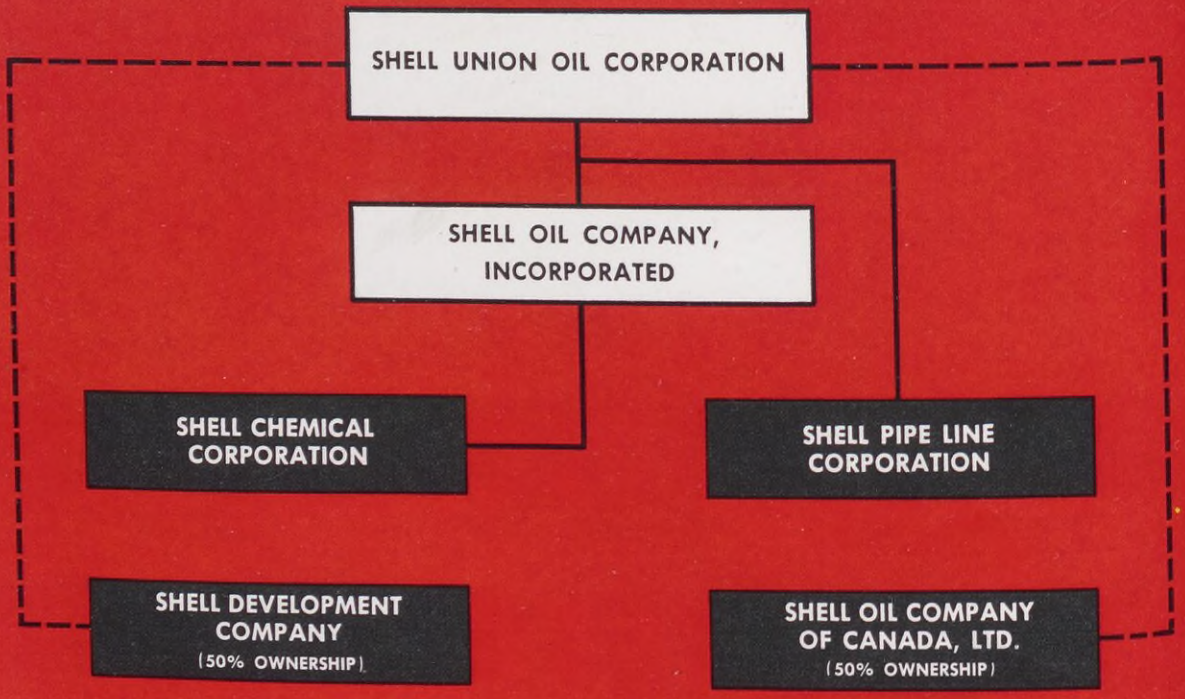

Corporate Simplification:

SHELL OIL COMPANY

IT WILL be of interest to all employees that the following step in a long-range plan of corporate simplification has been adopted by Shell and will become effective September 30th.

On that date Shell Union Oil Corporation will take over the business and assets of its wholly-owned subsidiary, Shell Oil Company, Incorporated, Shell Union having previously changed its name to *Shell Oil Company*.

Many of you will recall that, at one time, the Shell Union holding company had separate operating companies in the Far West, Middle West and East Coast. In recent years the operations of these three companies were merged into Shell Oil Company, Incorporated. Now the operations of Shell Oil Company, Incorporated, will be consolidated into the holding company under its new name, Shell Oil Company.

Shell Pipe Line Corporation and Shell Chemical Corporation, which will be wholly owned by Shell Oil Company, will not be involved in the corporate consolidation and will carry on their own operations as before (see the charts on the opposite page).

The staff organizational planning, which has been in progress since the end of the war, has already achieved such results in streamlining the organization from top to bottom that the consolidation calls for no staff changes at the operating level and no material change in the official positions of the senior managerial staff. Under the new set-up the Chairman of the Board of Directors will be George Legh-Jones as at present; the Chairman of the Executive Committee will be Alexander Fraser, and the office of President will be filled by H. S. M. Burns, formerly President of the operating company, Shell Oil Company, Incorporated.

With the consolidation, employees of Shell Oil Company, Incorporated, automatically will become employees of Shell Oil Company (formerly Shell Union) under precisely the same conditions, policies and employee benefit plans as before.

SHELL NEWS

VOL. 17—No. 9 SEPTEMBER, 1949

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

Employee Publications Division
Personnel Department, New York

contents

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LAND OF EXOTIC COLOR

Many Shell employees raise beautiful flowers in their gardens, but few as exotic as the brilliant hibiscus being shown on this month's front cover by Mrs. Richard Lee, a stenographer in the Honolulu Division office. Shell staff members in Hawaii pick the blooms to give their offices a touch of the color in which the Islands abound—and which is told in the article, "Shell in Hawaii," beginning on Page 2.

The cover picture was taken by Edward D. Adams, a professional Honolulu photographer who recently won a $1,000 first prize in an annual cover contest conducted by COLLIER'S magazine.

SHELL IN Hawaii

Since 1927 the company has operated a marketing division amid tropical island splendor

By Ozé Van Wyck

BOMBS falling on Pearl Harbor in 1941 awoke many Americans to the closeness of the relationship between Hawaii and the continental United States. But even four years of war, with the Islands as hub of operations in the Pacific, did not complete the education of mainland residents on this subject. It sounds fantastic, but—

"What kind of money is used in Hawaii?" is a question which the Hawaii Visitors Bureau received only yesterday from a prospective tourist. "What is the language generally spoken?" is another. One inquirer wanted some used Hawaiian stamps and the lively young Americans of the Bureau staff took delight in sending the philatelist some excellent portraits of George Washington and Benjamin Franklin.

Hawaii is as American as apple pie or fried chicken. Air-conditioned office buildings are equipped with Coca-Cola dispensers and "new look" stenographers. Styles introduced on New York's Fifth Avenue last week are being worn this week on Bishop Street and at the Oahu Country Club. Hamburgers, hot dogs and ice cream sodas are sold on the beach at Waikiki. In fact, there is nothing American which you can't find in Hawaii, except long flannel underwear.

American—But Different

But Hawaii is also as individual as *papaia*, the melon that grows on a tree, or *poi*, the native starchy food which every mainlander tastes and immediately calls wallpaper paste. Hawaii is American—but wonderfully different! Orchids grow in the backyard. People go barefoot at every opportunity. Out in the parks they play football and baseball without shoes. Pretty girls, caught out in the rain, take off their smart open-toe sandals and nylons and carry them under their arms.

Everybody speaks English, of course, but speech is jewelled with Hawaiian expressions. They would be tongue-tied without that most popular of all words, *pau*, which means finished, completed, done. Breakfast is *pau*, wrecked automobiles are *pau*,

Tank trucks deliver Shell fuels, lubricants and special products throughout the Islands, just as in other Marketing Divisions, with the exception that routes run through lush tropical mountain scenery, above, and pineapple fields, below.

even love affairs are *pau!* They couldn't live without it. *Kokua* is another—you never ask for help or information, you ask for *kokua.* A girl or woman is always a *wahine. Kapu* appears on signs instead of keep out or forbidden, and the Shriners' Hospital for Crippled Children put up a sign for its little patients, "Jeeps Kapu Indoors." This meant that tricycles and scooters must stay out of the wards. Nobody in Hawaii goes north, east, south or west, they go *mauka,* toward the mountains, *makai,* toward the sea, and so on, as you'll learn the first time you ask for directions.

Into this picture of American efficiency and sub-tropical charm, Shell fits as essentially as a piece of a jigsaw puzzle. One of four oil companies operating in the Islands, Shell's family of 82 men and women has contributed importantly to the prosperity of the Territory and its people.

There are eight islands in the Hawaiian group, 6,435 square miles in extent, about the size of Connecticut and Delaware combined. This is a mere speck, of course, in the vast expanse of the Pacific, which explains how they remained undiscovered until 1778. Into this small area is packed one of nature's greatest variety shows, including live volcanoes, wild canyons, surface geysers and forests of tree ferns.

The eight islands stretch 300 miles along Latitude 20 North, almost on a straight line from Mexico City. They are 2,090 nautical miles from San Francisco and 3,394 miles from Yokohama. This strategic location makes Hawaii a natural stopping place for trans-Pacific voyages.

When the first missionaries arrived from Boston in 1820, New England ideas and ideals began to shape Hawaii's destiny. Americans played the chief role in deposing Queen Liliuokalani in 1893 and establishing a new republic in the Pacific.

Republic Was Annexed in 1900

This led to the most important fact in Hawaii's history. After knocking at the door of Congress for several years, the Republic of Hawaii was annexed in 1900. Note that word—annexed. If you want a fight or a nice case of ostracism, just refer to Hawaii as a colony. The Islands came into the Union of their own free will with the political status of a territory, the same as Oklahoma, Arizona, Iowa or Indiana, before they became states. Today, a bill is pending in Congress to make Hawaii a state, the 49th star in the Stars and Stripes.

Most people are inclined to think of Hawaii as one big Waikiki Beach where beauteous maidens weave their hips in the hula and life is just one long swim in emerald waters. Not so! Waikiki is there—and so are the maidens. But more important is the fact that American initiative and American principles of freedom have developed these lovely Islands into a land of progress with a high standard of living.

Hawaii's population is 550,000, half in Honolulu. By "racial antecedents," these Americans include 181,000 Caucasians, called *haoles* in

The Honolulu Division office is like Shell offices everywhere, with only an occasional strange sounding word—like *wahine*—setting its routine off from Chicago, Baltimore or Seattle. The work of a Shell family of 82 men and women is administered from its modern interior.

Shell had a big stake in the colorful dedicatory ceremonies for Trans-Pacific Airlines at Honolulu, because it services the line with fuel and lubricants. With a typical Hawaiian touch, a 60-foot orchid lei was draped over the noses of two of the Trans-Pacific planes.

Island talk, 176,000 Japanese, 54,000 Filipinos and 36,000 Chinese. Official records say there are only 11,000 pure Hawaiians, but there are 70,000 part Hawaiians. Other racial groups have smaller numbers.

Business in the Islands totals $1,250,000,000 a year. Raw sugar, worth $93,000,000, and pineapple, $82,000,000, are the backbone of Hawaii's economic life.

Island Life Is Motorized

Hawaii is completely motorized. Streetcars long ago gave way to modern gasoline and diesel busses and trolley coaches. Busses and trucks have replaced railroad trains. Travel between islands, once done by overnight steamers, now is done almost exclusively by airplanes which cover the distances in 30 to 90 minutes.

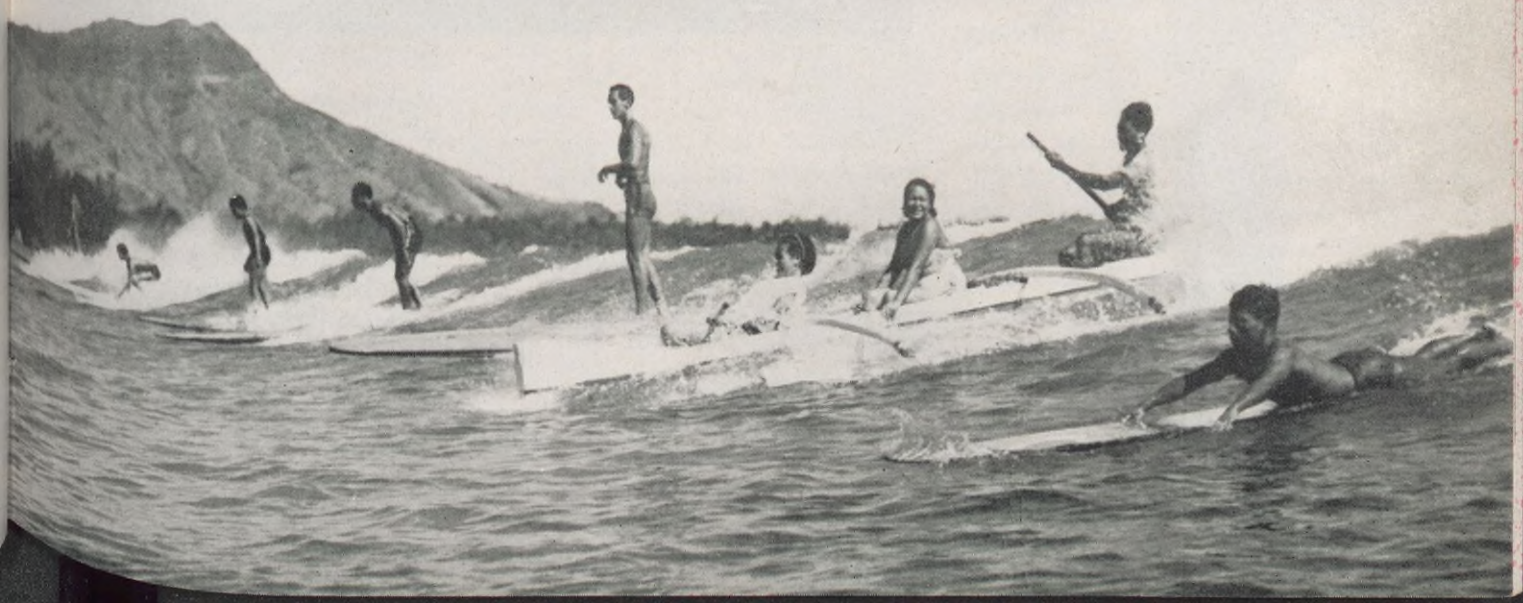
Shell entered Hawaii in 1927. Today all types of business in the Islands look to Shell for service. On the pineapple plantations of Libby, McNeill and Libby, 500 pieces of gas and diesel equipment are powered and lubricated by Shell products. Honolulu rides to work with the aid of Shell fuels, lubricating oils and greases used by the Honolulu Rapid Transit Company, which hauls 4,000,000 passengers a month. Trans-

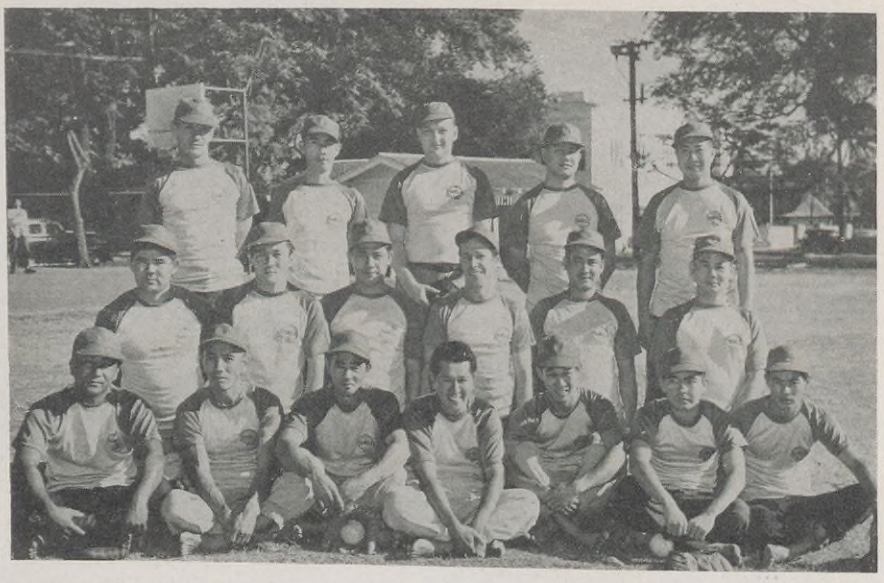
For cargo vessels, luxurious liners like the one at right and airplanes, Honolulu is the crossroads of the Pacific, thus enhancing its importance as a market for petroleum products which keep both industries and the large tourist trade flowing. >

<Tourist and Shell employee alike can sail off Diamond Head in modern versions of the outrigger canoe or sun themselves on balmy beaches.

Shell's Honolulu offices, in the right foreground, look out upon busy, palm-bedecked Bishop Street. >

Surfboard riding, below, synonymous with Hawaii, is a favorite off-hours recreation for Shell employees who live in the islands. V





Like many another Marketing Division, the Honolulu Office is active in inter-company sports. The Division softball team, above, plays in the Business Men's League. In the Shell Golf Club photo below, Division Manager Wallace C. McBain stands third from left in the group of players.

Pacific Airlines use Shell products exclusively in inter-island service. China National and British Commonwealth Pacific depend on Shell to fuel their planes at Honolulu's international airport for flights across the Pacific and down under. Hilo Transportation and Terminal Company, which handles all supplies and raw sugar to and from the plantations on the Island of Hawaii, uses Shell gasoline, diesel fuel and lubricants. Shell Turbo Oil 27 is used to manufacture electricity on Oahu by the Hawaii Electric Company and on Hawaii by the Hilo Electric Company. Shell is pre-eminent in serving the ships of the world that touch at Hawaiian ports.

Hawaii's 120,000 registered motor vehicles have 150 independent Shell dealers and garages to fill their tanks and check their oil. The first "New York type" service station built West of the Rockies was opened recently by Hirano Brothers in Honolulu.

Fishing with a throw-net is strenuous. Native fishermen sweep the nets over the water, weights sink the edges rapidly and trap the fish. It's an art—requiring a sharp eye and strong arm.

Division Is "On Its Own"

"Honolulu Division has to be efficient because we are on our own out here, the farthest outpost of the Company," says Division Manager Wallace C. McBain. "We have Shell Research back of us, of course. Engineers from our Products Application

It's not standard equipment, but the abacus works faster for some, like Kanji Tsuneda, Treasury Clerk, above, than an electric adding machine.

Of the Honolulu Division's three depot terminals on the islands of Maui, Oahu and Hawaii, the largest one is at Honolulu on Oahu.

Department come out to help us in serious technical problems. Shell Chemical technologists give great assistance in agricultural problems. But generally speaking, our men have to know fuels, lubricants, chemicals—everything, not just one product. That goes for our Treasury group, too, as well as for Sales and Operations. For instance, when a steamer radios for Shell bunkering service, the Treasury boys are prepared to guide them in port clearances, wharf regulations, provisioning and all the other details of international travel."

Division Has 3 Terminals

Honolulu Division has three depot terminals. The largest is Honolulu, on the island of Oahu, with 45 employees. Hilo depot terminal on Hawaii has a staff of seven. The third is on Maui where five employees operate the depot and marine terminal. In addition, there is a subdepot on the island of Molokai. Elsewhere in the Islands, agencies distribute Shell's wide range of products.

Ten bulk products are shipped to Hawaii. These include two grades each of aviation gasoline, automotive gasoline, diesel fuel and fuel oil. Kerosene and solvent are the others. The Islands also get a full line of Shell oils and greases. Most of the products are shipped from Martinez Refinery, with occasional shipments from Wilmington.

The climax of Shell's service to Hawaii has been the introduction there of agricultural products which have saved the Islands millions of dollars. Every acre of pineapples is now soil-fumigated and approximately 60 per cent of this work is done with Shell Chemical's "D-D". Many people think "D-D" prevented the abandonment of much profitable acreage. A leading authority sums up Shell's service in this conservative statement:

"Shell Chemical made a big contribution to Hawaiian agriculture in 'D-D'. This product rejuvenated the practice of soil fumigation and came at a critical time in the pineapple industry.

"Another Shell contribution was DDT in solution for use as an insecticide. Shell Resitox D25 aided the pineapple industry in developing control measures for the mealy bug and stimulated a program of great value."

Civic Duties Not Neglected

As in other Divisions, Shell's Honolulu Division is aware of its civic as well as its business responsibilities in Hawaii. Shell men and women are active in committees and drives of various kinds; the Division annually contributes to and supports the work of Chamber of Commerce, Community Chest and Hawaiian Visitors Bureau.

In short, Shell in Hawaii is an integral part of the busy, growing Territory which may become our 49th state in the not distant future.

A Survey of 1948

An Outline of the World-Wide Activities of the Royal Dutch-Shell Group of Companies, Based on the Annual Reports of the Royal Dutch Company and the "Shell" Transport and Trading Company

(*From the* SHELL MAGAZINE—*House Organ of the Shell Group of Oil Companies*)

DURING 1948, world-wide refinery capacity, though considerably increased, was still not sufficient to supply all demands. Through nearly all of 1948 supplies in the United States were no more than adequate to meet domestic demand, in spite of heavy imports of crude and fuel oil from the Caribbean area and from the Middle East. As a result, the prices of all products remained high and firm until the last two months of the year, when the domestic prices of fuel oils started to weaken.

The consumption of fuel oils in the troubled and slowly recovering world outside the U. S. also fell short of

expectations, although to a much smaller extent than in the U. S. This, together with the weakening in the U. S. fuel prices, resulted in a reduction of world prices for fuel oils. Such a swing of the pendulum from widespread shortage of fuel oils, accentuated by transportation difficulties, to a surplus of supply and ample transportation is a feature to which the oil industry is susceptible, though the full flexibility of operations, especially in refineries which the largest units of the industry, and the Group in particular, have built up, enables adjustments to be made which to some extent minimize the economic consequences of these fluctuations in the relation between supply and demand.

The progressive increases in demand for petroleum products in general continued in 1948, though in most areas outside the United States these increases were restrained by restrictions imposed in varying forms having their origin in the currency and economic problems of postwar world adjustment. In many areas progress is still hampered by continued disturbances.

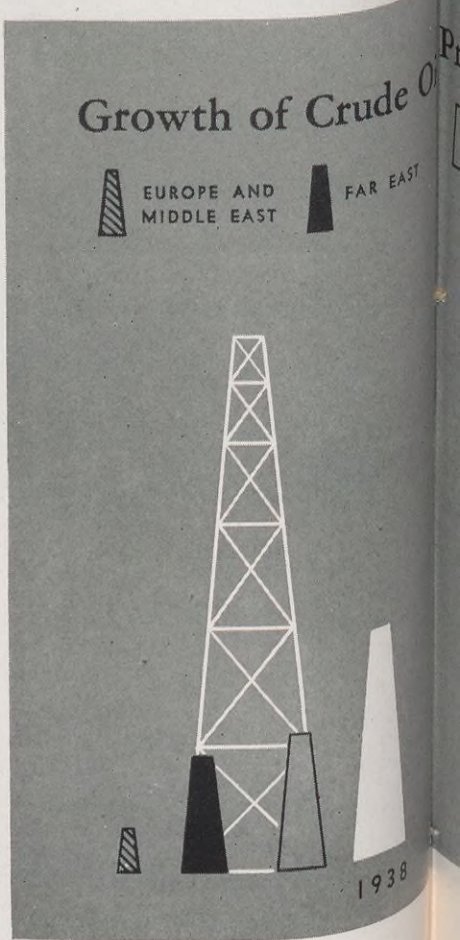
Although it is difficult to forecast how rapidly world consumption of petroleum will continue to expand, there is no doubt that the room for expansion is very great if the interests of a wide range of potential consumers are to be met. As an indication, the estimated requirements of the countries participating in the European Recovery Program — requirements which are based on an estimate of essential needs — foresee an aggregate consumption of petroleum products in 1953 about 33 per cent above the present consumption level. Similarly, the requirements of markets in Africa, the Far East and South America are likely to grow at least as rapidly.

Exploration & Production

The quantities of crude oil and natural gasoline produced by Group Companies and all other companies in which the group has a substantial interest (i.e., associated companies), together with crude oil available under long-term contracts with third parties, was 339,800,000 barrels in 1948, compared with 283,100,000 barrels in 1947. This increase of 20 per cent is all the more gratifying as the production in Roumania and Austria has been omitted from the 1948 figures since, as a result of political conditions in these countries, it was denied to world markets.

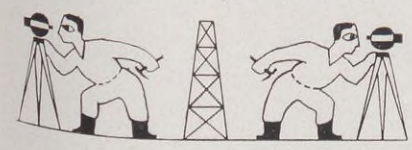
The figures show substantial increases in production in Venezuela, the United States and British Borneo. The rapid recovery in production in Indonesia is conspicuous evidence of the progress made in rehabilitation.

Group and associated companies own substantial refining facilities in the Netherlands Antilles, Venezuela, Trinidad, Argentina, the United States, Canada, the United Kingdom, the Netherlands, France, Belgium, Germany, Denmark, Italy, Egypt,



British Borneo, Indonesia and Australia which were in operation throughout the year; further considerable progress was made in the rehabilitation and expansion of many of these refineries and the construction of new ones. The total crude throughput of the refineries in 1948 was some 353,000,000 barrels,* compared with some 303,000,000 barrels in 1947.

Group and associated companies engaged in the distribution and marketing of petroleum products in prac-



tically every country in the world, outside the U.S.S.R. dominated areas, have been fully active in consolidating their positions in the expanding world market and renewing the widespread appreciation of Shell services.

*The difference between these figures represents, mainly, short-term purchases less sales.

The total sales of Group and associated companies for the year 1948 showed an increase of about 7 per cent on sales in 1947.

Chemical Developments

Based on the work of the research centers at Thornton (near Stanlow, Cheshire), at Amsterdam, and at the laboratories of the Shell Development Company in California, further considerable expansion was witnessed during 1948 in the manufacture of chemical products from petroleum.

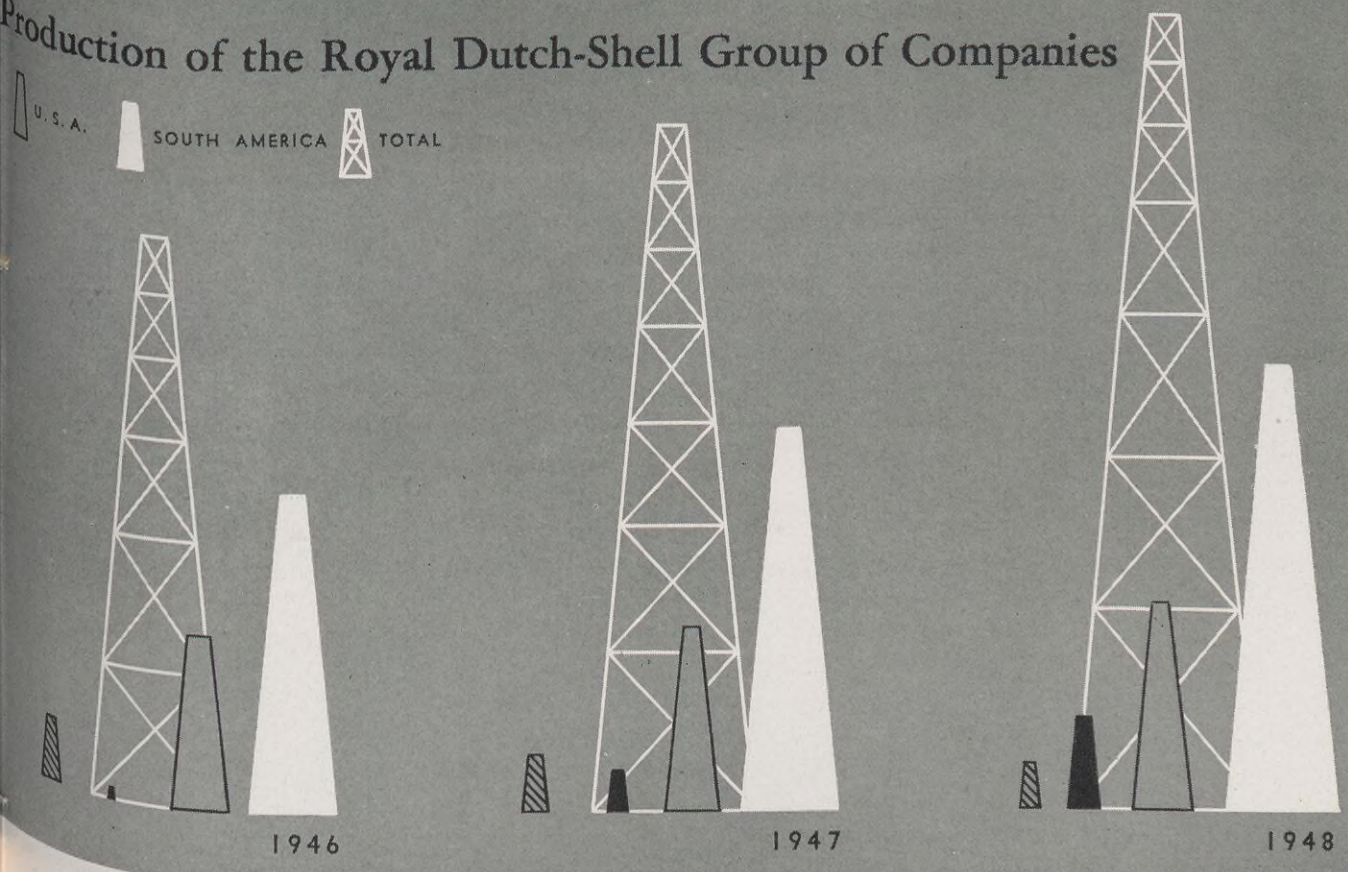
The synthetic glycerine plant of Shell Chemical Corporation at Houston, Texas, started operation successfully in 1948. In recognition of its work in developing the synthetic glycerine process, Shell Development Company received in the United States the 1948 Award for Chemical Engineering Achievement. The production of synthetic glycerine, for the first time on a commercial scale, is of considerable industrial significance in view of the world shortage of oils and fats from which natural glycerine is obtained. Shell Chemical Corporation also placed in operation during the year several new plants for the manufacture of chemicals, including ethyl chloride, ethyl alcohol and hexylene glycol, which have a wide range of industrial uses.

With the continued shortage of fertilizers, the capacity of the ammonia

plant of Shell Chemical Corporation in California, was double that of 1946. Extensions are also being made to the fertilizer plant at Ijmuiden, in the Netherlands.

After some further setbacks in the construction of the chemical plant at Stanlow, in Cheshire, it came into operation in April last. This plant will make an important contribution

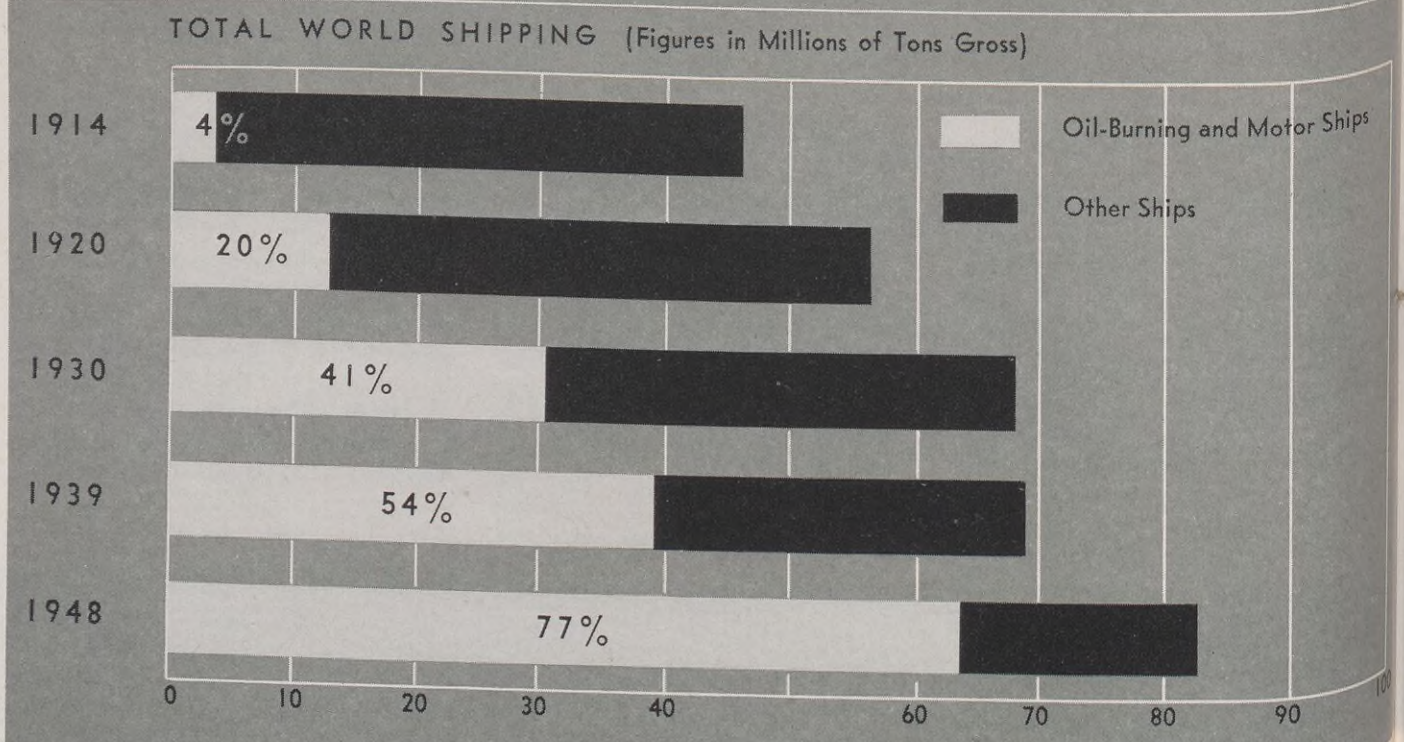
Production of the Royal Dutch-Shell Group of Companies



PETROLEUM PRODUCTS FOR SEA TRANSPORT

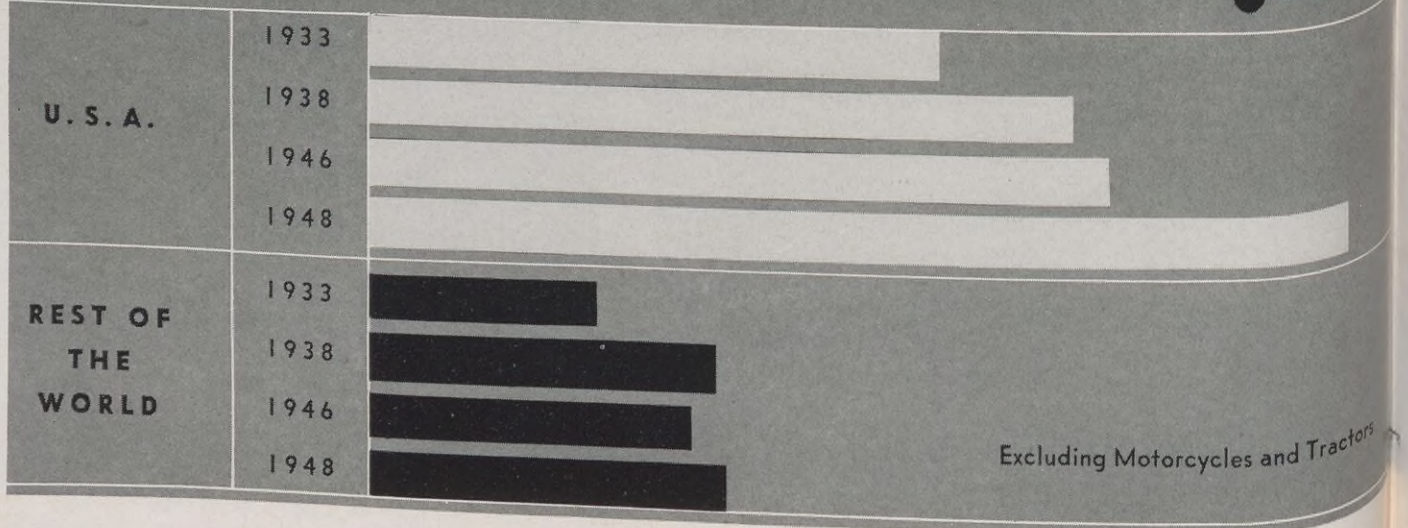
Growth of World Shipping

and increase in Oil-Burning and Motor Ships



PETROLEUM PRODUCTS FOR ROAD TRANSPORT

Relative Growth in Numbers of Motor Vehicles



to the United Kingdom economy, and will result in appreciable savings in the expenditure of dollars for solvents and other chemicals previously imported from abroad.

The capacity of Stanlow for the manufacture of "Teepol" was enlarged during the year, and the plant will shortly be producing at a rate of approximately 75,000 tons a year, which is six times the original capacity. Nevertheless, further extensions are still under consideration, as the market for this product continues to expand.

Progress on construction of the "Teepol" plant in Pernis, near Rotterdam, continued during the year and the plant is expected to come into operation shortly. Construction of the plant at Pernis for the manufacture of base material for plastics (polyvinyl chloride) has been delayed on account of delayed deliveries of materials and equipment, but this plant is also expected to begin operations in 1949.

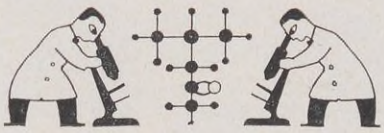
In partnership with a French chemical group, work was started on the construction of a plant at Petit Couronne for the manufacture of "Teepol" in France. This is the first plant to be constructed in France for the manufacture of chemicals from petroleum.

Research

The Group's research program continues to insure its position as one of the leaders in all technical aspects of the petroleum industry.

An important part of this program is directed toward the improvement of manufacturing methods and of the quality of the Group's products, as well as toward the development of new applications of them. Liberal provision has also been made for research of a fundamental and exploratory nature designed to lead to entirely new developments. Another part of the research program is directed toward exploration and production and, in this respect, the laboratory in Houston, U. S. A., which was opened in December, 1947, has already yielded important results.

The Group is particularly fortunate in that its research program is analogous to that of an international scientific organization. The policies and programs of the research laboratories in the United Kingdom, the Netherlands and in the United States are jointly planned and coordinated, thus ensuring a world-wide conception of problems and enabling each research center to concentrate on pro-



grams best adapted to their respective organization and equipment. Research work on such a scale entails considerable expense, the current annual expenditure of this organization being between £5,000,000 and £6,000,000. The Group's research organizations and its research programs have always been assured of continuity through good years and bad, as indeed they must if they are to build on sound foundations and pursue important studies of a long-term nature, the final results of which may take years to achieve.

Personnel

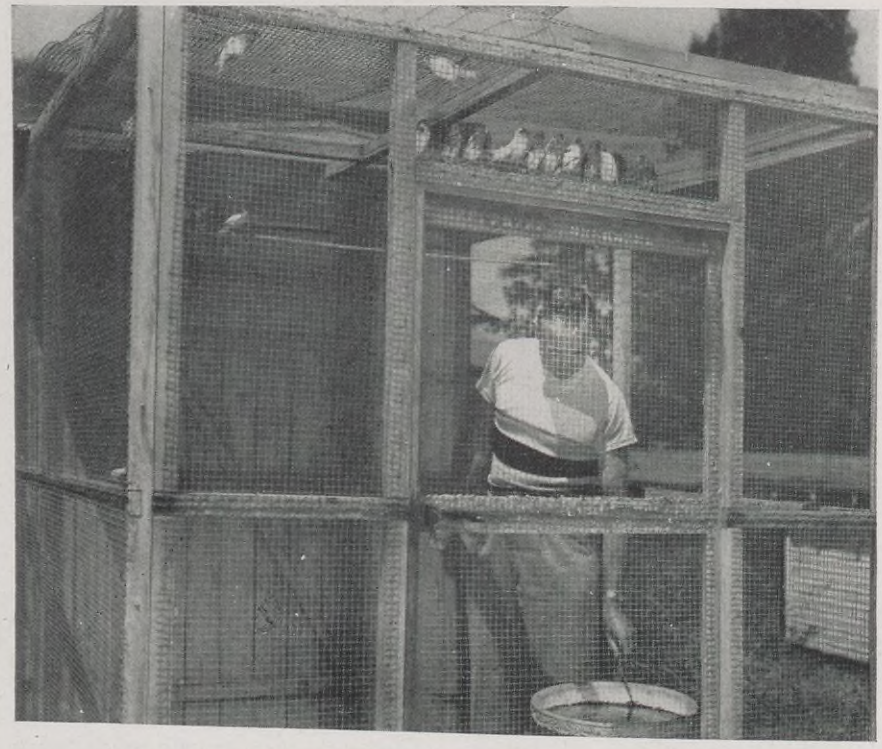
In the Annual Report of the "Shell" Transport and Trading Company Limited, the Chairman, Sir Frederick Godber, said:

"I am happy to record yet another year throughout which the staff have displayed the loyalty and efficiency which have always characterized the tradition of our service. It would be incorrect to give the impression that conditions for staff have returned to normal; unsatisfactory living conditions still persist in many parts of the world; the housing problem, though easier, is by no means solved and conditions in some areas have been irksome for other reasons. The staff, among whom is a large portion of younger men recruited out of the Services after demobilization, have, when and where necessary, borne with cheerfulness temporary separation from wives and children. . . .

"Our continued efforts to promote harmony and understanding between labor and management have been largely successful. . . ."

Shell employees throughout the world now surpass 250,000.

At the Cardon, Venezuela, refinery site (below), the combination of location and climate made the going rough for Shell construction employees.



Daily care and attention is necessary to canary breeding. Ray's outdoor cage, adjoining the canary house, provides ample exercise space, an important factor to songsters' health.

In addition to winning trophies and blue ribbons for his own birds, Ray is also in demand internationally as an expert judge at shows staged by many other canary breeders.

"There's

Ray Ross, Drilli
Available Champi

DON'T give nature all the credit when you hear a canary pouring out a flood of brilliant music. The canary's song is art, not accident, and is the result of careful planning and training. Nature does its share but is ably assisted by the breeder who raises and trains the bird.

One of the men who have brought American canaries to their high excellence is Raymond A. Ross, drilling foreman in the Los Angeles Basin Division. Ray started his Shell career in 1919 at Oilfields, historic training ground in Shell's early days. He has worked in every field in California, and he's known all over the world for his canaries.

In Germany, the home of canary breeding, Ray is respected as an expert breeder who has been awarded the Gold Medal of the Karlsruhe Bird Lovers Club. Down in Venezuela and Cuba, they send to Ray when they want birds of fine quality. Hawaii has invited him to judge their canary show and they're expecting him at Edmonton, Alberta, in December, to judge the birds on display there.

Every Note a Distinct One

A canary's song may seem a haphazard mixture of notes flung out at lightning speed with bewildering changes. But Ray knows each one and to him every note is as distinct as the letters on this page.

"That's the hollow bell—loo, loo,

"Music in the Air"

Foreman in the Los Angeles Basin Division, Makes Performers In His Well Bred and Trained Canaries

loo," he will say. "And that is the *glucke*. Hear that cluck-cluck sound?" Then he will explain that canary singing is made up basically of rolls, which are what the layman calls trills, and tours, which are beats or single notes. There are many kinds of each. The hollow roll is considered the finest, because of the richness of the sound. Bass and bell rolls are also good. It is a tribute to Ray's skill that he knows them all and is always in demand as a judge both here and abroad.

Two systems of scoring are used in contests. One has 30 points; the other, an English system, 100 points. Americans use the English system.

Songsters Have Scored Above 70

Of course, there is no such thing as a 100-point or 30-point bird, since no bird ever has all the notes for which points are given. Ray's songsters have scored above 70, which is extraordinarily high. He has a house full of gold and silver trophies, dozens of blue ribbons, has won sweepstakes for the best young bird a dozen times, and grand prizes for the best old bird 10 times. His latest triumph was the best bird in show award at the last Long Beach show and again at the last Los Angeles show.

Advising those who wish to buy canaries, Ray says:

"A bird which sings the hollow roll, bass roll, hollow bell and flutes can be considered a good bird. Of course, the customer can't tell these notes, being inexperienced. The best thing to do is to hear the bird sing and find whether he likes it. The next best way is to deal with a recognized breeder who has a reputation for good singers. All people don't like the same kind of bird. Some prefer soft, gentle rolls and tours. Others like a busy, noisy song which can be heard clear down to the corner. It's a matter of taste.

"Appearance, incidentally is no indication of song quality.

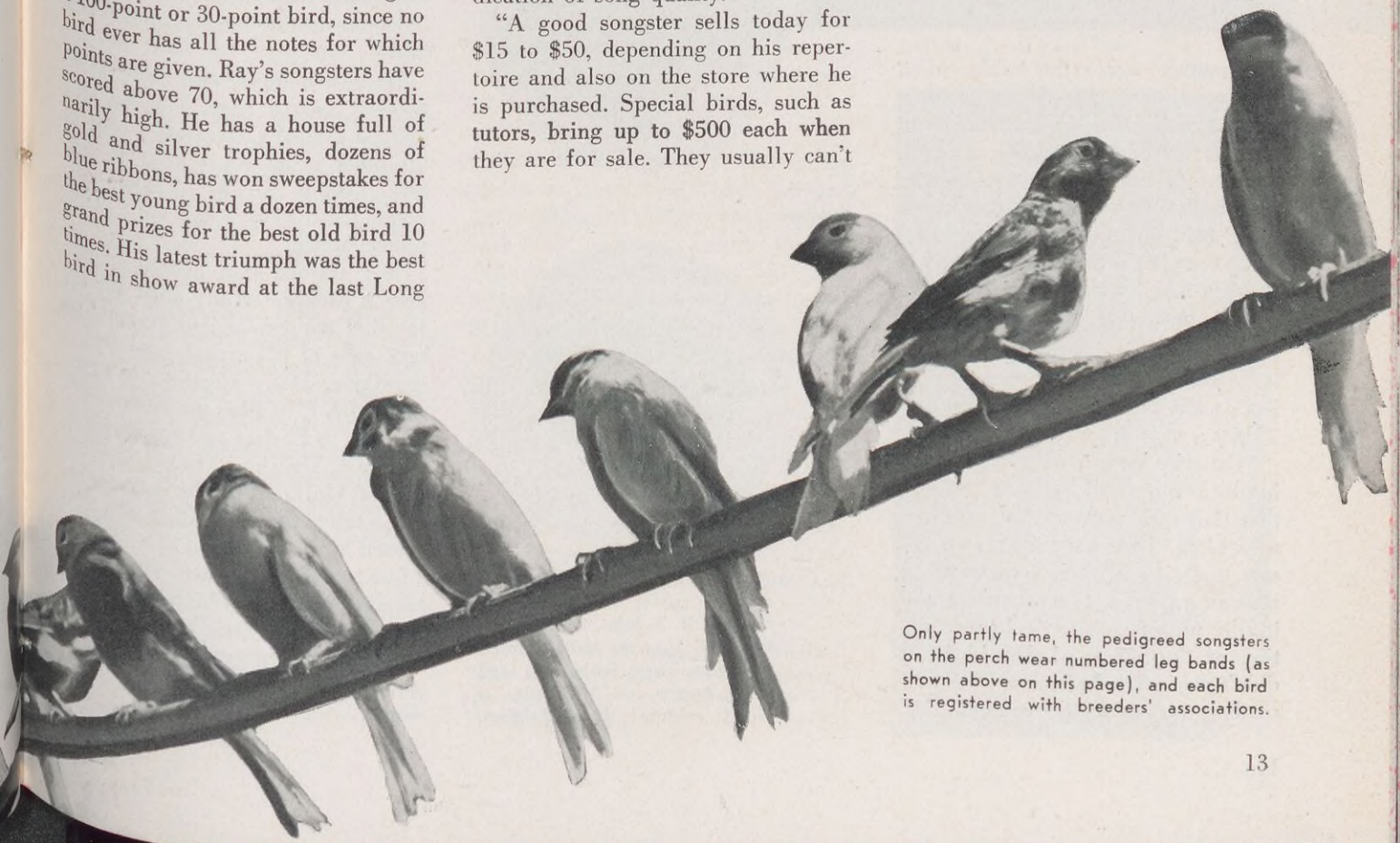
"A good songster sells today for $15 to $50, depending on his repertoire and also on the store where he is purchased. Special birds, such as tutors, bring up to $500 each when they are for sale. They usually can't be bought."

That mention of "tutor birds" started the conversation on the breeding and training of canaries, about which Ray is also an authority. He has the pedigree of every bird he ever raised. Race horses are not mated more carefully than his canaries.

"Only the male birds are singers," Ray remarked. "If a bird has a fine voice and has a pedigree showing that

he comes from other good performers in the male line, it is more than likely that his progeny will be first class, too. Blood tells in canaries, just as it does in horses and people.

"However, not every one of a sing-



Only partly tame, the pedigreed songsters on the perch wear numbered leg bands (as shown above on this page), and each bird is registered with breeders' associations.

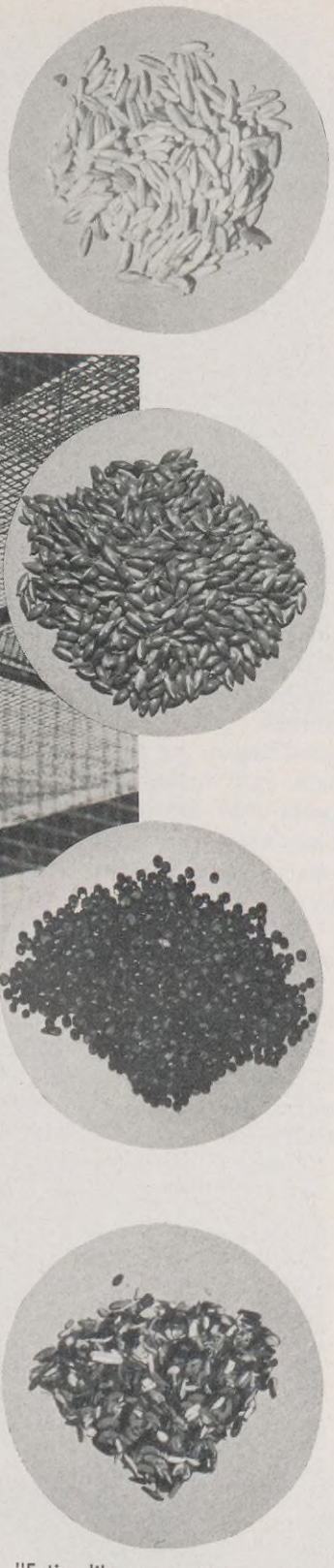
er's sons will be equally good—there again they're like humans. And you'll remember that some of Man-o'-War's colts were failures on the track.

"The mother is chosen for general health and strong, deep chest. Her pedigree also is important. Birds mate twice a year and the hen lays from three to six eggs. We hitch a wire cup to the cage and throw in some doe hair for the female to build her nest.

The mother weans the babies when the they are a month old and we then put the young ones into the large flight cage to develop their body muscles. When they are four to five months old, they go into training cages with a tutor bird in another cage nearby. They soon begin to imitate him and to develop their own capabilities.

"I believe that 75 per cent of a bird's singing is due to heredity—that is, to the success of a breeder in selecting the bird's parents. The other 25 per cent is due to proper training.

"Canaries learn to sing from listening to a tutor bird but it is not true that they will pick up the songs of wild birds. They have their own talents and sing in their own way. An attempt was made to mechanize training by use of an electrical transcription of the voices of fine birds. It didn't work. The harshness of the recording was bad for the young birds."



"Eating like a canary" means international cuisine to these prima donnas. It includes, top to bottom, oats from the United States, canary seed from Spain, rape seed from Austria or Wisconsin, a "treat mixture" from Belgium.

Ray's colony ranges from 150 to 300 birds, depending on the season and how much time he can devote to them. The females are kept in the large flight cage, a combined house and cage in the back yard where they get plenty of fresh air, sunshine and exercise. Males are kept separate in smaller cages, either in the house or in the garage.

Canaries live from 12 to 15 years but there is record of a Methuselah which lived to 30 years in Atlanta and another which attained 29 years in San Francisco. They go into shows and contests at six months. Four years is the limit of competition and tutoring work. They breed up to eight years of age.

Birds Carry Leg Band for Life

All birds are banded and retain the leg band throughout life. It is numbered to identify the bird in the permanent records of the association to which the breeder belongs.

Ray was asked if canaries ever become pets in the sense of being handled or stroked.

"It's very rare," he answered. "If you hand-feed a bird from the time he is born, he does not try to avoid you. Otherwise, they never overcome their objection to the human hand. Watch this."

He moved slowly and gently as he reached into a cage, but the bird hopped excitedly from one corner to the other in an effort to avoid capture. Despite months of kind treatment, the bird was still alien to the human world.

Ray warned that nobody should keep a canary (or any other animal, for that matter) unless prepared to take care of it properly and feed it regularly. Daily attention is necessary. Mrs. Ross likes the birds almost as much as he does and assists him in this work. They have "two of the handsomest children in the Company," a son taller than his father who purchased a service station after making a fine record in the Navy, and a popular daughter still in high school. The four Rosses and their couple of hundred pets lead a very happy and interesting life in their home in Long Beach.

L. J. GROSSHEIM

T. K. MILES

ESTHER BENTLEY

Shell People In The News

L. J. GROSSHEIM has been appointed Manager of the newly-created Fire and Safety Department at Houston Refinery. Mr. Grossheim began his Shell career in 1921 as a laboratory analyst at Wood River Refinery. He has been at Houston Refinery since 1938 and held positions first as Fire and Safety Inspector and later as Supervisor of the Fire and Safety Division prior to his new assignment.

T. K. MILES has been appointed Head of the Asphalt Department of the Shell Development Company Emeryville Laboratories. A graduate in engineering of Stanford University and of the Massachusetts Institute of Technology, where he received his Master's degree, Mr. Miles came to Shell Development Company in 1939 as an engineer in the Asphalt Department. From 1942 until 1944 he was on leave with the National Roster of Scientific and Specialized Personnel. Upon his return to Shell Development, Mr. Miles became Assistant Personnel Director of the Emeryville Laboratories.

ESTHER BENTLEY, Head of the Cleveland Marketing Division Stenographic Department, was elected National President of the Women's Army Corps (WAC) Veterans' Association at the group's third annual convention last month in Milwaukee. A veteran of WAC service in Belgium and France, Miss Bentley served as the Association's National First Vice President in 1948.

Miss Bentley joined the Cleveland Division Stenographic Department as typist in 1936 and advanced to head of the department in 1941. She enlisted three years later and remained in service until March 1946.

GEORGE W. BARNETT, Station Engineer at Shell Pipe Line's Kilgore, Texas, pumping station, was presented with the National Safety Council President's Medal August 13. This highest award for saving life by the Schafer Prone Pressure Method of artificial respiration was given Mr. Barnett for saving the life of Mrs. Vesta Harrison of Longview. She had been fishing with her parents March 11 on Barton's Lake near Gilmer when their boat overturned. Mr. Barnett, fishing nearby with another man, recovered Mrs. Harrison in an apparently drowned condition and administered artificial respiration in his boat. After his companion had rowed the boat to shore, Mr. Barnett continued his effort until she revived.

This is the sixth such award won by Shell Pipe Line employees. The earlier recipients were D. M. Farrell, 1938; W. D. Gregory, 1940; V. L. Burress, 1942; C. W. Hooper, 1943, and M. T. Miller, 1947.

George W. Barnett received the National Safety Council President's Medal at a special ceremony from H. H. Anderson (at left), Vice President of Shell Pipe Line Corp. >

The eighth in a new series of organization charts

September—1949

Plant Manager

B. M. Downey

Plant Superintendent

F. E. Caddy

Industrial Engineer

F. H. Colburn

Assistant Plant Superintendent

G. Purcell

Manager Personnel & Ind. Relations

H. A. Dufresne

Manager Stores

I. M. Shore

Office Manager

W C. Bevil

Manager Department "A"

F. G. Watson

Manager Department "B"

C. H. Plomteaux, Jr.

Manager Department "C"

V. L. Keldsen

SHELL CHEMICAL CORPORATION
HOUSTON PLANT
ORGANIZATION CHART

Administrative Control Only

Director of Research

J. Anderson

Chief Engineer

H. Q. Duguid

Chief Chemist

V. W. Wilson

Chief Technologist

H. I. Wolff

Acting Manager Department "E"

C. L. Walter

Acting Manager Shipping

H. L. Shores

CRUDE OIL a la CARTE

The Industry's Raw Material Is as Varied as a Gourmet's Menu, With Sweet or Sour, Heavy or Light, Green or Black, All Carefully Selected for the Refinery Bill-of-Fare

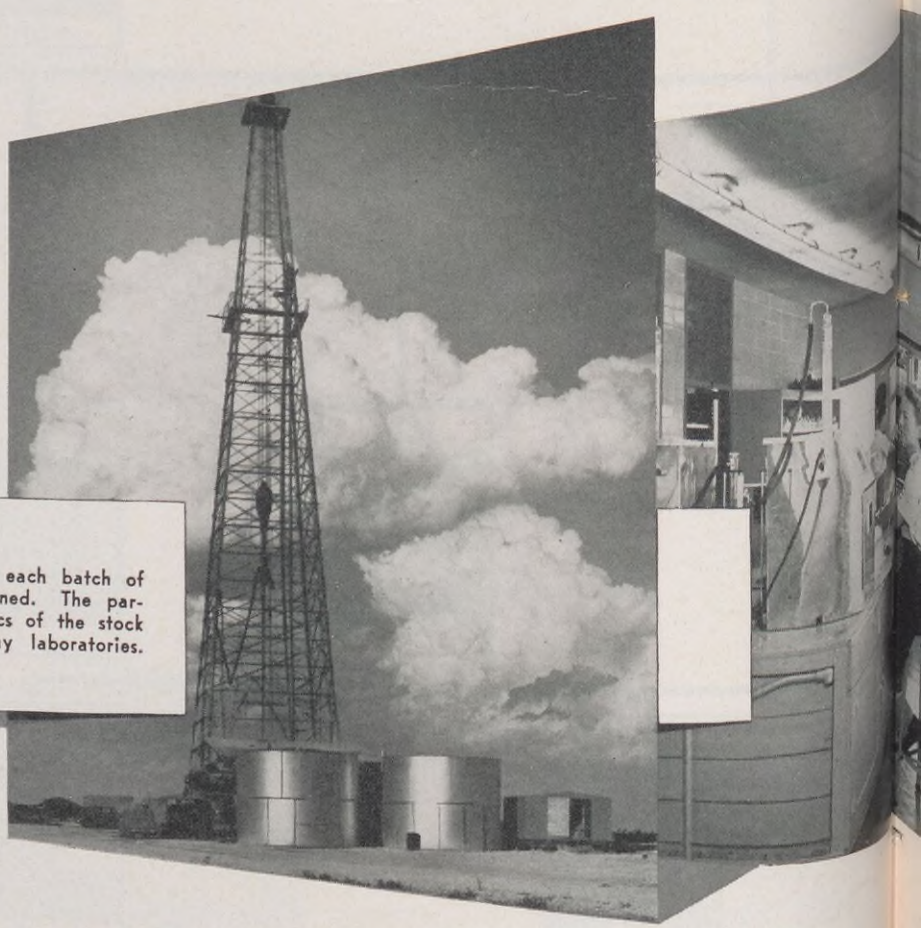
WHEN a new well come in, especially the discovery well of a new oil field, its rate of flow is one yardstick of success but an accurate dollar-and-cents evaluation can't be made until an assay is made of the crude. This is because crude oils are so varied in their characteristics that what is good for one refinery is bad business for another. In fact, there are almost as many kinds of crude as there are oil fields. Some crudes may be almost as thin as water, while others are so thick that they will scarcely flow unless heated. Their colors range from black through green, brown, and even a light tan. Some crudes have very little odor, while others, called the "sour" crudes, smell like rotten eggs.

To get the right crude oils for a refinery's needs, the refiner has to select his ingredients with a care that rivals the gourmet's ritual with spices and condiments. For example, the Wood River Refinery, ordering thousands of barrels of crude for a run of gasoline, would never accept the Baxterville crude used by the Norco Refinery to manufacture asphalt, because Baxterville yields about 55 per cent asphalt and only approximately 8 per cent gasoline. For its run, Wood River would probably use a West Texas crude with a high gasoline yield.

To make sure its refineries are continually getting the best crudes possible for quality products and efficient refining, Shell maintains three crude oil assay laboratories at Wood River, Houston, and Wilmington. These laboratories periodically evaluate all the crudes being produced by the Company and being used or considered for use in manufacturing. With a continuing schedule for testing, the laboratories assay the production of established fields once or twice a year.

As new wells and new fields are brought in, their production is immediately assayed to evaluate and determine the disposition of the crude. It may be that the crude of a newly discovered field, because of chemical or physical characteristics, doesn't fit into the manufacturing needs of a Shell refinery and can be of more value to the Company if sold to another company.

Right now the laboratory at Houston does all the assaying for the



Between well and refinery, each batch of crude oil is carefuly examined. The particular refining characteristics of the stock are evaluated by the assay laboratories.

Norco and Houston Refineries. The Wood River laboratory evaluates crude for that refinery and Wilmington for the California refineries.

The laboratories, using samples ranging from five to 15 gallons, put them through a simple distillation process which answers three paramount questions: What products can be made from each crude? How much of each? Of what quality? Thus, when a Shell refinery selects the crude or crudes it can best utilize with its equipment, it has an accurate idea of what the results will be before it starts a run.

What makes one crude oil different from the next depends on how clubby or how individualistic are the atoms which make it up. The crude is formed of hydrogen and carbon atoms grouped into molecules called hydrocarbons. The number of atoms grouped together in the hydrocarbons determines the nature of the crude oils and since this number varies from one crude to another, the types of hydrocarbons—and hence the types of crudes—are profuse.

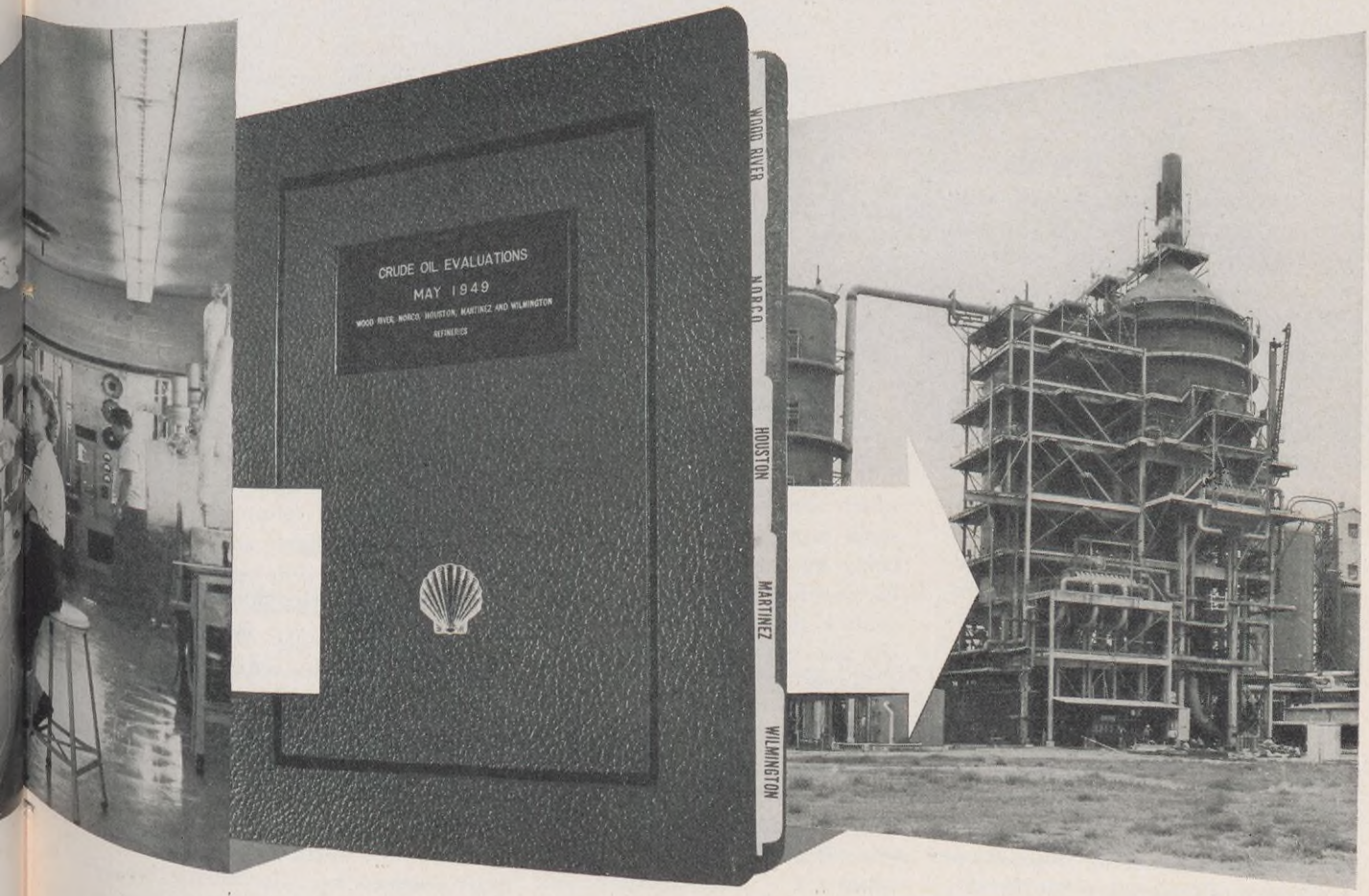
Thanks to modern advances in chemistry, hydrocarbons can be broken down and reformed with different characteristics. It is possible in the laboratory to manufacture almost any desired petroleum product from any given crude. But to do this in the refinery on a commercial scale would sometimes require expensive alterations of equipment and lengthy processing and reprocessing.

Crudes Are Chosen Carefully

For this reason the refiner carefully chooses crudes which his available equipment can convert into products with the highest efficiency and lowest cost. With certain products in mind, he chooses the "selective crudes," that is, the crude oils known to yield the highest percentage of the products or groups of products he wants. On the other hand, the refiner may utilize a "general purpose" crude, one of balanced composition having a versatility lending itself to whatever refining needs of the moment may be.

As an example of selectivity, take the Baxterville crude previously mentioned. The Norco Refinery has used millions of barrels of this special purpose raw material in its asphalt plant, because half and more of Baxterville will come out as high quality asphalt without requiring special or prolonged refining. The refinery also draws on Hawkins crude as another source of supply—an oil yielding up to 37 per cent in asphalt. Both crudes also will yield from 22 to 24 per cent in No. 2 fuel oil. Thus, they might be considered doubly selective, depending upon the refinery requirements. Both, incidentially, are poor in gasoline.

East Texas crude is a favorite of the Houston refinery for its lubricants plant because of a high yield in lube oil fractions. There are also some crudes of West Texas and New



Mexico preferred by manufacturers of lube oils.

The majority of crude oils in the United States can be roughly classified as "general purpose" crudes. This is because their yields strike a good balance among all the requirements of refining, giving up everything from asphalt, through the middle distillates, and up through gasoline and other highly volatile hydrocarbons. Some might yield a fraction of most everything; while others, though short in some, are not outstanding in any particular fractions and are, therefore, utilized for general purposes. West Texas types of crude generally fall into this classification, as do California crudes like the Kettleman, East Coalinga and Canal used at Martinez Refinery and the Signal Hill, Brea, Seal Beach and Ventura refined at Wilmington.

Except for a comparatively small group of "condensate" crudes, there are no crude oils that could be strictly evaluated as "gasoline crudes." Some, like Benedum, Kettleman, and Canal, yield relatively high proportions of gasoline, but have other characteristics which make them good for other purposes. Advancement in refining technology has made the general lack of "gasoline crudes" a problem of lessening importance. Today, with most refineries employing modern cracking methods, the hydrocarbons can be reshaped and increasing yields of gasoline are obtained from heavy crude oils and from the heavy fractions of light crudes. Nearly half the crude oil in refinery intakes emerges as gasoline—and virtually all crudes contribute to the total.

Composition Guides Treatment

Of course, there are other considerations in selecting crudes for refining than the one of how much of one fraction or another a crude will yield. There are, for example, viscosity and pour point, two factors which grow in importance if the crude has to be transported any great distance. The pour point is the temperature at which crude oil congeals—or turns from a liquid to a solid. Viscosity is a measure of the crude's fluidity at a given temperature. If both the pour point and viscosity are high, which means the oil will grow sluggish and sticky more quickly than others, it costs more to pump it through pipe lines, or transfer it to and from tanks, tankers and refinery vessels. High viscosity indicates a large asphalt content, while a high pour point may be the result of both wax and asphalt.

Impurities in crude oil also have a bearing upon the cost of refining and quality of the manufactured products. Among common impurities which have to be removed or reduced to a point where they become harmless are sulfur, salt and water. The water can easily be removed, but the others require more treatment.

Salt, if present in excessive amount, may leave damaging deposits in refinery equipment, and would damage home furnaces, diesel engines and other consumer equipment if not adequately removed. Some salty impurities even tend to form hydrochloric acid when they come in contact with steam, with resultant corrosion of refinery metals.

Sulfur Corrodes Equipment

Sulfur in crude oils also corrodes refinery metals and, like salt, has to be removed or chemically neutralized. It can also be dangerous in other ways, since hydrogen sulfide, a sulfur compound found in several crudes, is a poisonous gas. Large concentrations of hydrogen sulfide, which readily comes off the crude in vapor, have to be watched carefully by tank gaugers and others handling crude oil.

It is this same hydrogen sulfide which causes the unpleasant odor of some crude oils, resulting in their being known as "sour" crudes. To be classified as "sour" a crude must contain more than three-quarters of one per cent of sulfur—otherwise it's a "sweet" crude. West Texas fields are noted for their many "sour" crudes, but there are several outstanding exceptions. The Bedford-Devonian is "sweet," and so is the Benedum which Wood River Refinery uses. Benedum has only .04 per cent sulfur.

One of the most important factors in evaluating crude oil is its specific gravity—or in simpler terms, its weight. Since the lighter products from any crude oil are generally more valuable—like gasoline, gases and other fractions off the top of the barrel—a lighter gravity tends to increase a crude's worth. In fact, oil men always cite gravity when describing a crude, and the oil's price on the open market depends in part upon it. Other factors, such as transportation, figure into the cost, however, and two crudes of the same specific gravity don't necessarily cost the same.

Crudes in Same Field May Vary

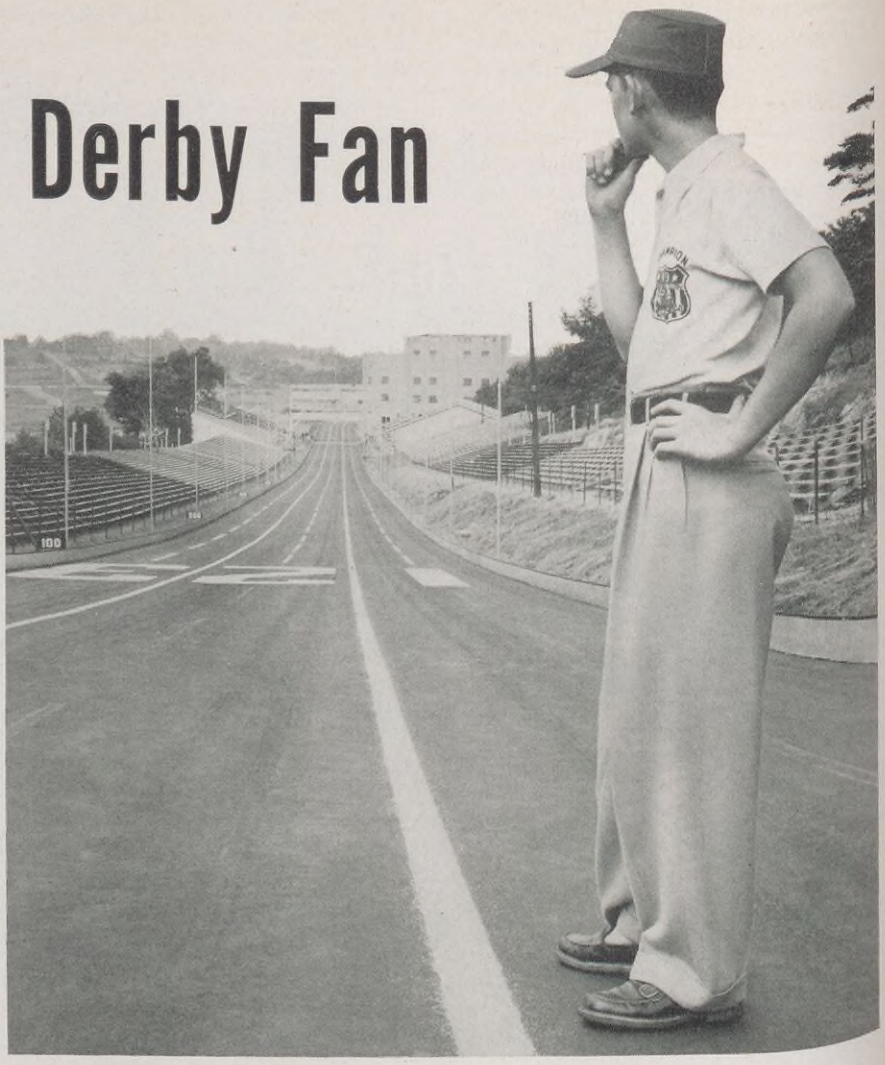
Two crude oils from adjacent wells in the same field may even vary widely in characteristics and price, because they may be produced from different oil-bearing horizons. In the Gulf Coast area, for example, oil may be drawn from as many as 24 levels in the same field, and from different levels in the same well. Mid Continent crudes often differ appreciably in age of formation and are obtained from structural formations ranging in age from the Ordovician period of the Early Paleozoic era to the Cretaceous period of the late Mesozoic era, two extremes in geological age groups.

The trick, then, for the refiner, is to know exactly what the multiple traits of available crude oils are and to match them with the requirements of his particular manufacturing program. Varying costs in transportation must also be figured in. As the versatility and efficiency of refinery equipment have advanced, the importance of differences in crude oils has been gradually eased, but the variations range over such a broad scale that the refiner will probably always have to keep a close check on them. The evaluation charts of the assay laboratories are constantly before him and, like the gourmet, he knows the tastes and colors and smells that will make each day's menu a success.

What Some Typical Crudes Will Yield

Based upon evaluation reports made by Shell's crude oil assay laboratories at Wood River, Houston and Wilmington, the beakers above illustrate principal characteristics of five of the crudes Shell uses to manufacture its products and the approximate yields of each major fraction. Assuming that cracking will be employed in addition to straight distillation at all refineries, the laboratories make their tests accordingly and estimate yields after cracking. As can be seen in the beakers, Benedum and Baxterville can be considered "specialty" crudes, East Texas is strong in intermediate fractions, and Kettleman and Brea, two crudes used by the Pacific Coast refineries, are utilized for general purposes. The assay laboratories also determine important factors like specific gravity, pour point, viscosity, and the type and amount of impurities in each crude oil—all key considerations in selection of charge stocks for quality products.

Soap Box Derby Fan



AMONG the spectators at the recent All-American Soap Box Derby finals, held in mid-August at Akron, Ohio, was a man who for 12 years has spent part of his vacation helping make this classic event a success. F. C. "Brownie" Struckman is a dispatcher at Shell's Akron depot until Derby Week rolls around. But from the arrival of the first contestant until the Derby final, he steps into his chosen vacation role of welcomer to the incoming champions from far and near.

"I meet them at the airport or railroad station," he says, "and pile them into my official car. We follow a police escort, with screaming sirens, which speeds us through red lights so we reach downtown in a hurry. The kids get a terrific thrill on the way. Believe me, they eat it up!"

In a specially-decorated car, Brownie has been meeting the champs since 1935. Even boys whose parents drive them to Akron aren't denied the thrill of a triumphant entry. Brownie arranges to meet them on the outskirts of town and bring them in with a state trooper escort. When he has greeted all contestants, he lends a hand at transporting officials and visitors from the town to the race course. A Derby veteran, Brownie is known everywhere and never has to show his pass.

At Akron Airport, Jim Hillbrecht, local champion from Detroit, received a smiling welcome from Shell's "Brownie" Struckman.

Finals at Akron Since 1935

The National Finals of the Soap Box Derby have been held at Akron since 1935 to pick a winner from among the nearly 150 boys who have won local races in the United States, Canada, Alaska and Panama. The local races are sponsored jointly by one of a town's leading newspapers and the local Chevrolet dealer. Local winners are sent to Akron for the finals, and for four days are the guests of Chevrolet.

"You have to see the whole show to realize what it does for the kids," says Brownie Struckman. "They pitch in and work for each other. Boys who have been eliminated often work on the cars of those who still have a chance, even stripping wheels and other parts from their own machines to help a potential winner. That's real sportsmanship."

The Derby was suspended during the war years. After it was resumed, in 1946, Shell became active in it on a national scale. Soap Box Derby cars contain no engines, gravity alone moving them down the gently sloping race course. Therefore, reduction of friction by proper lubrication is of real importance to every

young racer striving for the title.

For the last three seasons, Shell has helped the youngsters solve their friction problems. The Company developed a special Soap Box Derby lubricant designed for the miniature racing cars and a free can of the lubricant is given each contestant when he enrolls. Another is presented on the day he runs his local race.

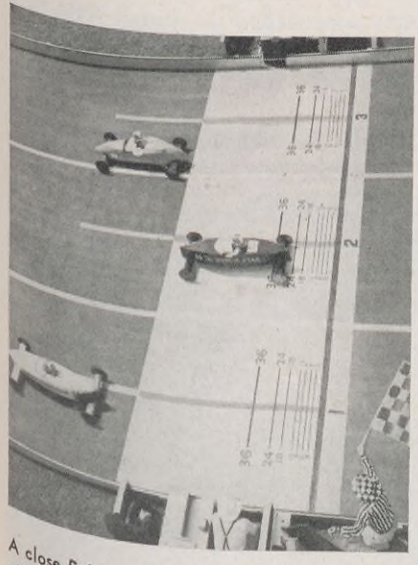
Shellubrication Available

Shell also offers the local racers a Soap Box Derby Shellubrication service. Miniature red and yellow auto lifts, each a small replica of the real thing, are used to raise contestants' cars from the ground so they are easily accessible for last-minute inspection and lubrication. The lifts are manned by uniformed Shell attendants. The Company also keeps on hand a supply of wire, bolts, nuts, screws, etc. for young racers with last-minute repair problems. To top off these services, Shell awards a specially designed tool chest as a prize in each local race as well as a more elaborate grand prize for the winner of the National Finals in Akron.

With the supplying of services and prizes, Shell has become an integral part of the Soap Box Derby. But just as important to the Derby has been the work and interest of people like Brownie Struckman.

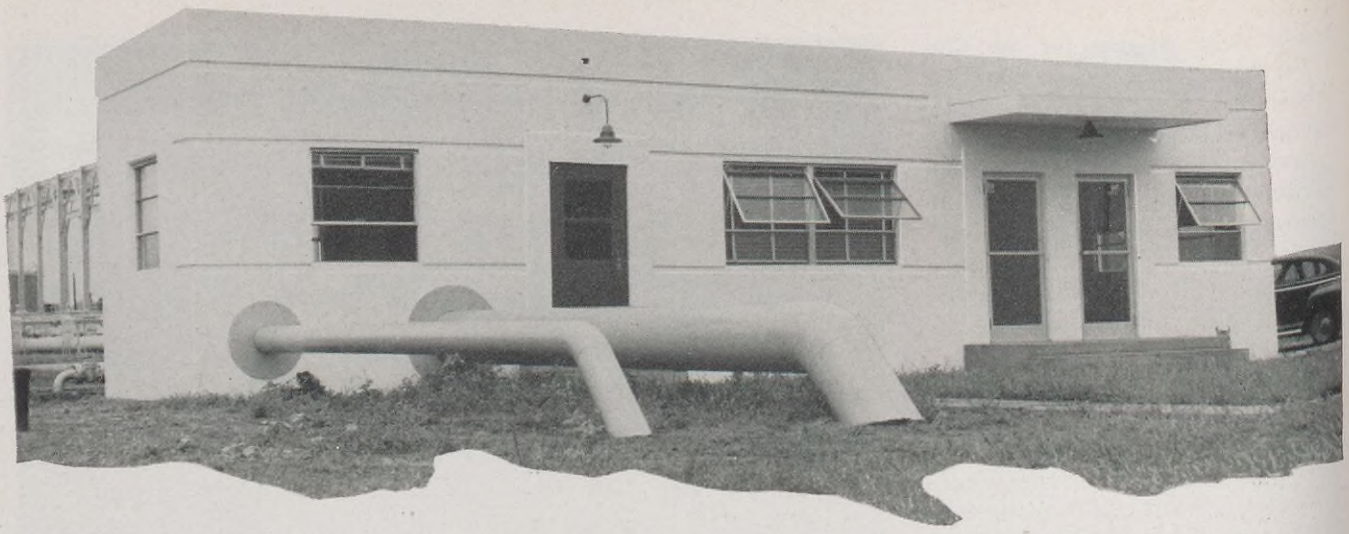
Loaded down with enthusiastic passengers, Brownie's special car enters Derbytown, a camp which provides quarters and recreation for the champions.

With Brownie, it's partly a personal matter, for he has a warm and sincere interest in the welfare of youngsters. Extremely active in sports himself, he has devoted hours to coaching boys in baseball, football and basketball. An only child, he's making up for any youthful loneliness by currently raising a family of six, ranging in age from three to 28. Of these six, two are boys. As you would expect, both young men, in their time, were enthusiastic Soap Box Derby racers.



A close finish in one of the preliminary heats at Akron. Careful lubrication does much to increase the speed of the tiny racing cars.

Local Soap Box Derby champions arriving at Akron by plane (above), train or car are met by Brownie Struckman in his highly-decorated official automobile. State or local police provide a noisy escort for the trip downtown.



New Tank Farm at Wood River

Facilities to Receive the Basin-Ozark Pipe Line System's Flow Have the Appearance of a Small and Busy Community

WHEN plans were laid for the new Basin-Ozark Pipe Line System, with its potential capacity of 260,000 barrels a day, some preparation had to be made for the river of crude oil that would flow into the Wood River Refinery. The answer was the refinery's Southwest Tank Farm, a huge battery of storage chambers sprawling over 190 acres of land.

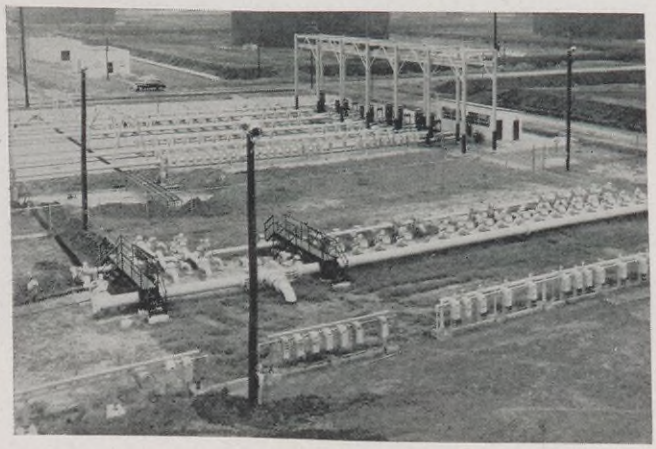
That's an area about 10 city blocks long and 10 wide. In fact the rows of tanks have the look of a small city of round buildings. There's even a "business district," which includes a gaugers' office building with locker rooms and other facilities, an engineering maintenance shop, a substation building, and a manifold control house. The tank "city" has more than three miles of streets, 72 street lights, 33 fire hydrants, and is surrounded by four miles of fence.

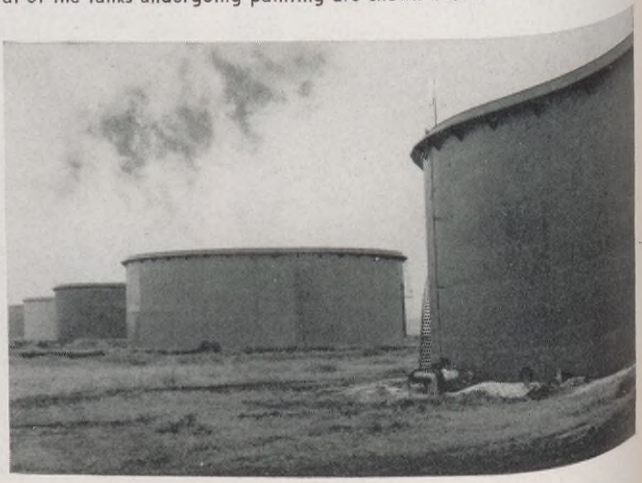
The tanks themselves would outweigh 220 railroad cars. It took more than 15 thousand gallons of paint to spruce them up. There are 22 in all. Fifteen of them, with double deck floating roofs, will each hold 131,000 barrels of crude oil. Six tanks have a capacity of 80,000 barrels each. One small one holds 5,000 barrels.

When crude oil flows into the tanks from the pipe line, out of them into the refinery, or is switched from tank to tank, the whole operation is controlled by push buttons. In the control house red and green lights flash on and off as a "flow sheet" control board keeps track of every stage of the operation.

The first tender from the Basin-Ozark System flowed into the farm early last month. Since then the intake has approached the farm's total storage capacity—nearly two and a half million barrels.

At the substation building, above, the new 22-inch Ozark pipe line and the old 10-inch line end and crude enters the tank farm. The farm's manifold system and several of the tanks undergoing painting are shown below.

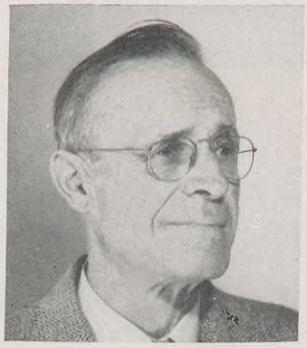




They Have Retired

Manufacturing

H. E. BROWN
Wood River Refinery
Engineering Field

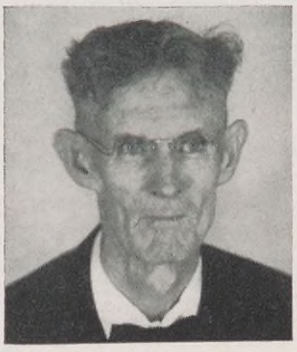


J. W. B. CHILCOTT
Wilmington Refinery
Engineering Field

T. P. GOMEZ
Martinez Refinery
Engineering Field

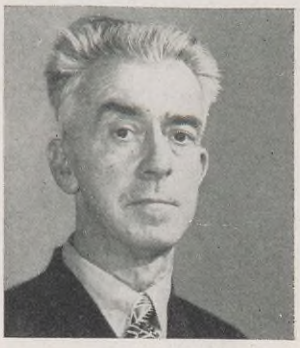
A. M. GRAY
Wilmington Refinery
Engineering Field

G. T. HARRIS
Wood River Refinery
Utilities



P. M. HARTNETT
Wood River Refinery
Engineering Field

R. V. HOOK
Martinez Refinery
Engineering Field



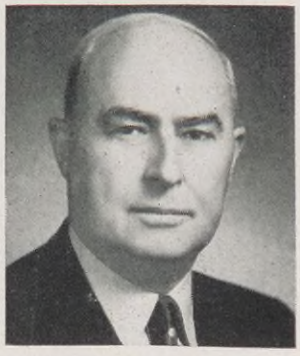
FREDERICK WATSON
Wilmington Refinery
Engineering Field

Treasury

E. F. JAMES
Los Angeles Office

Transportation and Supplies

J. F. McCAFFREY
Head Office



R. T. POTTS
Los Angeles Office

Coast to Coast

Division Manager R. S. Mitchell (right) presents a watch denoting 25 years of service to E. A. Stobbe, Operations Assistant-Engineering, one of 18 veteran employees honored in St. Louis.

James Zehrer (left) and John Drost (right) of the Sewaren (N.J.) Terminal Safety Committee present safety awards to Alfred Madsen, David Pocklembo, James Kovacs and George Commerton.

Baltimore Marketing Division Office employees attending one of the several "memory training" conferences conducted recently in the new Division Office conference room included, left to right, seated: Jeanne Lipp, Warren Doyle, Ernestine Koehler, Fern Moonaham, Melvin Smith, Mary Bonner, H. M. Whitehurst, Joesph Deigert, Mable Siskron, George Calvert, Norma Sanford, Florence Johnston and May Hardy. Standing in the rear of the room are George Swanson, William Temmink and John Weyforth.

The Plumbrook Country Club in Sandusky, O., was the scene of the August meeting of District Managers of the Cleveland Division.

Service Birthdays

Thirty Years

I. W. ALMOND
Martinez Refinery
Engineering Field

P. H. BURNETT
Los Angeles Basin Division
C. & M.

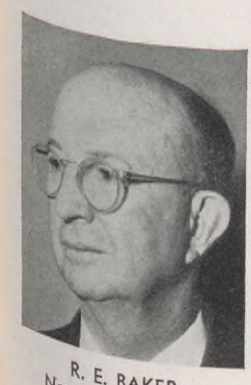
R. B. CULLEY
Los Angeles Basin Division
Production

U. J. LAURENT
Norco Refinery
Cracking

W. C. LUCAS
Norco Refinery
Personnel & Industrial Relations

CAESAR SAIZAN
Norco Refinery
Engineering Field

Twenty-Five Years



R. E. BAKER
New Orleans Area
Gas

L. C. BECK
Coastal Division
Drilling

P. J. BES
Coastal Division
Gauging

W. F. BUCHANAN
Shell Pipe Line Corp.
Mid-Continent Area

C. C. BUCKMAN
Sacramento Division
Operations

REUEL CASEY
Tulsa Area
Gas

E. P. CRAIGE
St. Louis Division
Treasury

C. C. CROSBY
San Francisco Office
Personnel & Ind. Rel.

R. F. DAWES
Los Angeles Basin Div.
C. & M.

F. E. GOODDING
San Francisco Division
Treasury

L. B. HUBBELL
Houston Refinery
Engineering Office

WILLIS KIRKLAND
Expl. & Prod. Research
Service

G. B. LORENZ
St. Louis Division
Operations

W. K. LUCK
Wilmington Refinery
Alkylation

W. E. McANANY
Wood River Refinery
Cracking

J. A. McQUADE
Los Angeles Basin Div.
Gas-Gasoline

J. A. MORGAN
Tulsa Area
Production

C. B. NEHER
Portland Division
Operations

J. A. St. PIERRE
Norco Refinery
Laboratory

J. E. SEAMON
New Orleans Area
Production

G. L. SIRARD
Sacramento Division
Sales

R. J. SUTTON
Los Angeles Basin Div.
Gas-Gasoline

T. E. SWIGART
Shell Pipe Line Corp.
President

G. D. THOMAS
New Orleans Area
Exploration

E. T. WILSON
Los Angeles Division
Sales

V. A. WOODS
San Francisco Office
Operations

P. H. WRIGHT
Los Angeles Basin Div.
C. & M.

SHELL OIL COMPANY, INCORPORATED

Head Office

20 Years

R. D. Burleson ..... *Marketing*
L. Farner ..... *Treasury*
C. Lipel ..... *Treasury*
D. C. Marschner ..... *Marketing*
J. P. McKeon ..... *Treasury*

15 Years

H. W. Megaw ..... *Transp. & Supplies*

10 Years

G. Fellows ..... *Marketing*

San Francisco Office

20 Years

Frances I. Greene ..... *Vice President's Office*
A. C. Maynard ..... *Marketing*
G. J. Smith ..... *Legal*

10 Years

E. F. Maggio ..... *Marketing*

Exploration and Production

HOUSTON REGIONAL OFFICE

20 Years

J. T. Morgan ..... *Administration*

10 Years

F. A. Burdick ..... *Gas*

HOUSTON AREA

20 Years

Elizabeth Beane ..... *Exploration*
F. J. Margeson ..... *Land*
Irene M. Reiniger ..... *Land*

15 Years

M. P. Goodman ..... *Treasury*

10 Years

W. E. Kitchen ..... *Treasury*

MIDLAND AREA

20 Years

C. H. Cunningham ..... *Gas*
E. E. Roberts ..... *Gas*
H. A. Shanks ..... *Purchasing-Stores*

15 Years

T. W. Hollis ..... *Production*

10 Years

J. H. Cranfill ..... *Production*
W. K. D. Goodson ..... *Treasury*
L. Henson ..... *Production*
J. V. Lindsey ..... *Land*

NEW ORLEANS AREA

20 Years

H. W. Hughes ..... *Land*

15 Years

A. M. Adair ..... *Production*
W. L. Botkin ..... *Treasury*
R. R. Brown ..... *Production*
J. W. Pittman ..... *Production*
W. E. Smith ..... *Personnel & Ind. Relations*

10 Years

L. Ardoin ..... *Production*
R. G. Parker ..... *Production*
L. J. Wagner ..... *Production*

TULSA AREA

20 Years

W. L. Aulbert ..... *Production*
C. C. Butler ..... *Production*
O. H. Jelf ..... *Production*
C. J. Pyatt ..... *Production*
G. R. Sizemore ..... *Production*

15 Years

S. N. Crowley ..... *Production*
J. G. Dwen ..... *Exploration*

LOS ANGELES REGIONAL OFFICE

15 Years

D. J. Demel ..... *Production*

COASTAL DIVISION

15 Years

J. O. Buckland ..... *Gas-Gasoline*
S. A. McClung ..... *C. & M.*

LOS ANGELES BASIN DIVISION

20 Years

W. A. Equitz ..... *Gauging*
H. L. McKinley ..... *Purchasing-Stores*
W. W. Walker ..... *Purchasing-Stores*

15 Years

I. L. Ellerman ..... *C. & M.*

ROCKY MOUNTAIN DIVISION

15 Years

F. W. Dean ..... *Exploration*

SAN JOAQUIN DIVISION

15 Years

K. T. McCamman ..... *Production*
W. A. Stokesbary ..... *Exploration*

10 Years

G. T. Self ..... *Gas-Gasoline*

PIPE LINE

15 Years

A. Silva ..... *Pipe Line—North*

EXPLORATION & PRODUCTION RESEARCH

20 Years

F. A. Van Melle ..... *Physical*

15 Years

C. P. Field ..... *Physical*

Manufacturing

HOUSTON REFINERY

20 Years

P. L. Benson ..... *Gas*
R. D. Miller ..... *Distilling*
M. Robison ..... *Cracking*
O. J. Ruff ..... *Utilities*
L. W. Smith ..... *Treating*
W. J. Snow ..... *Engineering Field*
B. C. Sykes ..... *Dispatching*
J. L. Thompson ..... *Distilling*
A. Vincent ..... *Engineering Field*
C. D. Warren ..... *Engineering Field*
C. D. Young ..... *Treating*

15 Years

D. L. Barfoot ..... *Engineering*
L. S. Cooper ..... *Treating*

10 Years

A. T. Bullard ..... *Fire & Safety*
A. H. Carlisle ..... *Cracking*
E. L. Lestarjette ..... *Engineering Field*
R. H. Zapp ..... *Engineering Field*

MARTINEZ REFINERY

20 Years

A. G. Cabral ..... *Engineering Field*
S. F. Lupo ..... *Engineering Field*
J. V. Silva ..... *Compounding*
B. Sprayberry ..... *Cracking*
A. O. Williams ..... *Control Laboratory*
K. E. Wilt ..... *Engineering Field*

10 Years

R. D. Hanna ..... *Distilling*

NORCO REFINERY

20 Years

C. J. Abadie ..... *Distilling*
A. J. Braud ..... *Dispatching*
S. P. Clouatre ..... *Engineering Field*

10 Years

L. E. Richoux ..... *Shipping*

WILMINGTON REFINERY

20 Years

J. Calafato ..... *Treasury*
D. R. Dalgleish ..... *Catalytic Cracking*
J. W. Gandsey ..... *Dispatching*
R. S. Reno ..... *Mechanical*
C. A. Roberts ..... *Alkylation*
E. D. Sharp ..... *Engineering Field*

WOOD RIVER REFINERY

20 Years

A. J. Albers ..... *Distilling*
O. H. Blair ..... *Engineering Field*
H. C. Frazier ..... *Engineering Field*
A. W. Habbe ..... *Gas*
R. R. Hoover ..... *Stores*
C. C. Neunaber ..... *Engineering Field*
A. C. Taylor ..... *Utilities*
E. F. Thomas ..... *Engineering Field*
W. Thompson ..... *Engineering Field*
C. A. Wentz ..... *Engineering Office*

15 Years

A. Hartley ..... *Engineering Field*
O. Kassak ..... *Lube Extraction*
O. P. Marlinghaus ..... *Engineering Field*
H. J. Miller ..... *Alkylation*
T. R. Reffett ..... *Engineering Field*
R. F. Ruckstuhl ..... *Engineering Field*
A. Spence, Jr. ..... *Engineering Field*

10 Years

D. J. Anderson ..... *Cracking*
E. Bean ..... *Stores*
L. W. Case ..... *Engineering Field*
R. F. Corrigan ..... *Engineering Field*
W. W. Culp ..... *Engineering Field*
F. D. Davis ..... *Engineering Field*
V. H. Edgar ..... *Engineering Field*
E. G. Engelman ..... *Cracking*
A. Guccione ..... *Engineering Field*
J. C. Knop ..... *Engineering Field*
L. R. McNeilly ..... *Control Laboratory*
J. A. Rigdon ..... *Engineering Field*
K. H. Travis ..... *Engineering Field*
V. V. Virgin ..... *Cracking*
B. L. Walters ..... *Treating-Light Oil*
W. F. Weeks ..... *Lube Vacuum*
R. L. Whitten ..... *Engineering Field*

Marketing Divisions

20 Years

J. O. Hiza ..... *Albany, Operations*
G. F. Troy ..... *Albany, Sales*
S. Cannon ..... *Atlanta, Operations*
K. F. Ehlenfeldt ..... *Baltimore, Sales*
M. J. Lomp ..... *Baltimore, Sales*
G. H. Stout ..... *Baltimore, Operations*
W. J. McDonough ..... *Boston, Sales*
W. R. Parker ..... *Boston, Operations*
L. A. Baron ..... *Chicago, Sales*
A. S. Pentland ..... *Chicago, Sales*
J. T. Regan ..... *Chicago, Operations*
W. A. Burnett ..... *Cleveland, Operations*
L. F. Christopher ..... *Cleveland, Sales*
L. M. Collard ..... *Cleveland, Marketing Service*
M. S. Dunham ..... *Cleveland, Operations*
L. A. McAbee ..... *Cleveland, Operations*
F. E. Miller ..... *Cleveland, Operations*
Katherine M. Prendergast ..... *Cleveland, Admin.*
J. J. Riley ..... *Cleveland, Operations*
W. R. Carbaugh ..... *Indianapolis, Operations*
J. Curran ..... *Indianapolis, Operations*
M. T. Gisler ..... *Indianapolis, Sales*
J. B. Jackson ..... *Indianapolis, Sales*
V. L. Jones ..... *Indianapolis, Operations*
L. H. Matthews ..... *Indianapolis, Operations*
C. Scott ..... *Indianapolis, Operations*
A. I. Shuppert ..... *Indianapolis, Treasury*
F. H. Sipe ..... *Indianapolis, Sales*
A. J. Wells ..... *Indianapolis, Operations*
R. G. Boardman ..... *Los Angeles, Sales*
E. C. Cornwell ..... *Los Angeles, Operations*
E. E. Ketchersid ..... *Los Angeles, Treasury*
E. J. Paull ..... *Los Angeles, Sales*
J. N. Kolb ..... *Minneapolis, Sales*
A. W. Kyndberg ..... *Minneapolis, Sales*
J. A. Braun ..... *New York, Operations*
H. Euler ..... *New York, Operations*
W. J. Hart ..... *New York, Operations*
M. H. Lee ..... *New York, Operations*
P. F. Mullane ..... *New York, Sales*
P. M. Schmidt ..... *New York, Operations*
L. Althaus ..... *Portland, Operations*
E. W. Carlson ..... *Portland, Treasury*
R. A. Swan ..... *Portland, Operations*
C. T. Wait ..... *Portland, Operations*
R. O. Dawson ..... *Sacramento, Operations*
O. E. Fritchman ..... *Sacramento, Operations*
O. A. Jensen ..... *Sacramento, Operations*
M. M. Millward ..... *Sacramento, Sales*
R. A. Dalton ..... *St. Louis, Treasury*
W. D. Evans ..... *St. Louis, Sales*
F. X. Moore ..... *St. Louis, Operations*
K. W. Osterhagen ..... *St. Louis, Treasury*
L. Standley ..... *St. Louis, Operations*
I. S. Flegel ..... *Seattle, Sales*
E. E. Lindquist ..... *Seattle, Marketing Service*
Helena M. McFarland ..... *Seattle, Admin.*

15 Years

C. D. Buckner ..... *Albany, Operations*
C. R. Jones ..... *Atlanta, Sales*
W. F. Brittain ..... *Baltimore, Operations*
E. Q. Kendrick ..... *Baltimore, Operations*
W. N. Smithson, Jr. ..... *Baltimore, Operations*
A. Williamson ..... *Baltimore, Operations*
D. J. Ahern ..... *Boston, Sales*
G. H. Delzell ..... *Chicago, Operations*
C. Laack ..... *Chicago, Operations*
L. T. McCroden ..... *Cleveland, Operations*
S. W. White ..... *Portland, Sales*
L. L. Eisfelder ..... *St. Louis, Marketing Service*
R. W. Mautz ..... *St. Louis, Treasury*
W. P. Miller ..... *St. Louis, Treasury*

10 Years

A. G. Cowan ..... *Los Angeles, Operations*
D. B. Keele ..... *Los Angeles, Sales*
P. R. Laughlin ..... *Minneapolis, Sales*
F. B. Eutsler ..... *Sacramento, Sales*
P. A. Franchi ..... *Sacramento, Operations*
J. R. Young ..... *Sacramento, Treasury*
T. J. Berryman ..... *St. Louis, Operations*
L. P. Dupuich ..... *San Francisco, Operations*
W. F. Mertel ..... *San Francisco, Sales*

Products Pipe Line

15 Years

Z. E. Baylis ..... *Toledo, Ohio*
H. T. Duls ..... *Meridian, Miss.*
S. L. Smith ..... *Greensboro, N. C.*

10 Years

M. L. Barrett, Jr. ..... *East Chicago, Ind.*
V. K. Leonard ..... *East Chicago, Ind.*

Sewaren Plant

20 Years

H. E. Flannery ..... *Terminal*

10 Years

E. H. Wolt ..... *Terminal*

SHELL CHEMICAL CORPORATION

20 Years

J. A. Brown ..... *Houston*
L. L. Donaldson ..... *Shell Point*
H. H. Harron ..... *Martinez*
A. Lamborn ..... *Shell Point*
A. H. Planz ..... *Shell Point*
M. Voogd ..... *Head Office*
E. W. Williams ..... *Martinez*

15 Years

J. B. Bennetti ..... *Shell Point*
W. H. Dietz ..... *Shell Point*
K. H. Fich ..... *Dominguez*
N. K. Grover ..... *Shell Point*
E. A. Potts ..... *Shell Point*
H. J. Shelley ..... *Martinez*
F. D. Ward ..... *Shell Point*
C. I. Wright ..... *Head Office*

10 Years

T. M. Brye ..... *Martinez*
P. P. Duggan ..... *Houston*
R. H. Elliott ..... *Martinez*
R. A. Holderman ..... *Shell Point*
C. A. Perkins ..... *Shell Point*

SHELL DEVELOPMENT COMPANY

20 Years

M. F. Sivertsen ..... *Emeryville*

15 Years

D. L. Yabroff ..... *Emeryville*

10 Years

J. E. Abernathy ..... *Emeryville*
E. S. Hill ..... *Head Office*

SHELL PIPE LINE CORPORATION

20 Years

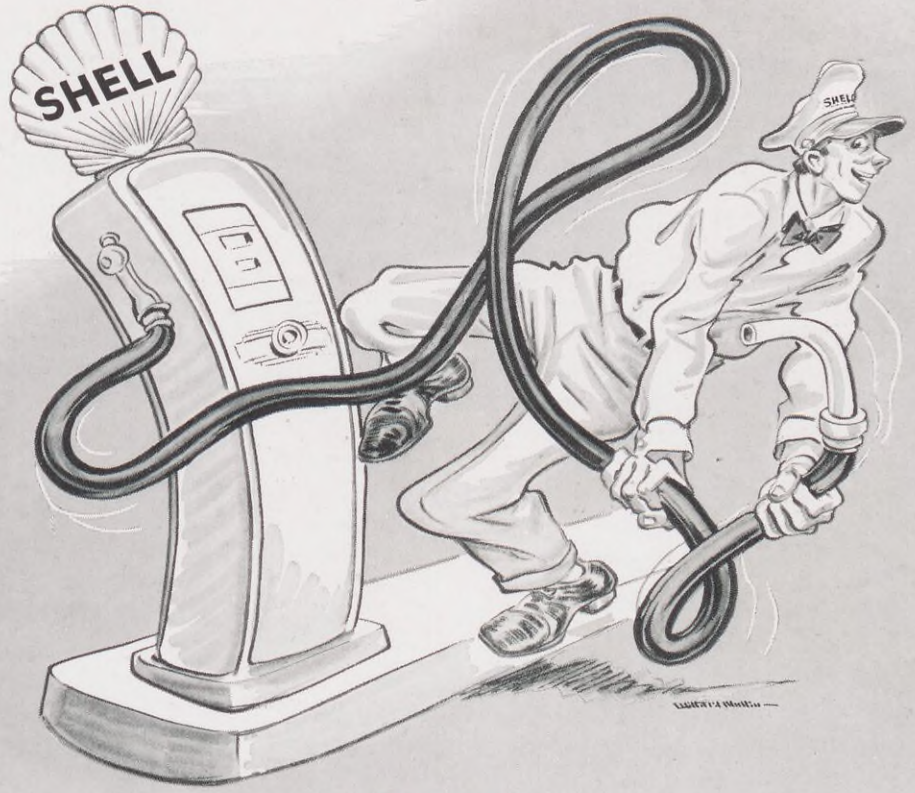
W. H. Craddock ..... *Texas-Gulf Area*
P. M. Crenshaw ..... *West Texas Area*
C. E. Crocker ..... *Mid-Continent Area*
C. Feuerbacher ..... *Texas-Gulf Area*
R. M. Lytle ..... *Mid-Continent Area*
J. D. McClinton ..... *Mid-Continent Area*

15 Years

R. M. Boatright ..... *West Texas Area*
D. B. Hicks ..... *Head Office*
J. C. Pepper ..... *Texas-Gulf Area*

matters of *Fact*

Shell Activated Premium . . . the most powerful gasoline your car can use.



there's a lot *EXTRA* in your job, too!

For every dollar paid as wages or salaries in 1948, Shell paid an additional 25¢ for other employee benefits.

Program for Security:

Provident Fund	8,606,000	
Pension Plan	10,260,000	
Social Security	974,000	
Total		$19,840,000
Vacations and Holidays		8,518,000
Sickness and Disability Benefits		1,471,000
Federal and State Unemployment Insurance Taxes		921,000
Workmen's Compensation Insurance (Premiums & Claims)		512,000

FAMILY PORTRAIT

SURVEYOR

VERNON L. FRASER

When a Production Department Surveyor is mentioned, we automatically think of the man who locates the exact spot where a well will be drilled. But the Surveyor has a lot more responsibility in the oil fields than just spotting the wells. Vernon L. Fraser, Surveyor in the San Joaquin Division, for example, also sets the stakes for roads, rig grades, tank settings and other surface facilities pertinent to drilling a well. He frequently surveys lease property lines, and does miscellaneous surveying for pipe line and pole line rights-of-way, construction projects, and for development of topographic and cultural maps. There are 60 Surveyors and Junior Surveyors in the Shell family.

Vern has been with Shell for 27 years, joining the Company as a rodman. Though various duties as rodman, seismograph shooter and surveyor have taken him as far afield as Casper, Wyoming, he has done most of his work out of the Bakersfield, California, office and is now located there.

Vern, Mrs. Fraser; a daughter, 20, and son, 18, have lived in the Bakersfield home Vern owns for the past 15 years. There he dabbles with home movies as a hobby. He would like to spend more time at woodworking and cabinet making, but the life of a surveyor is nomadic at times.