



Salmon Harvest  
on the Columbia

*"On Tour"*

JANUARY 1953

# 62nd Birthday C



# Observance



CONTINUING a custom started in 1941, Union Oil celebrated its 62nd birthday anniversary by inviting 51 veteran employees to take the day off and sit down with Company officials at a special birthday dinner. The celebration took place in Los Angeles on October 28—11 days after the official birth date—in order to assure the largest possible attendance of those invited.

Among the honored guests were five 40-year men, namely, Earl Canet, Lawrence Wolff, Jesse Marshall, James Rector and Roy Nelson.

Employees so honored for 35 years of continuous service were Ida Ruppert, Harry Alger, Edward Campbell, Rhuben Brown, Clarence Hand, William Mercer, Charles Brunk, Robert Roberts, Bert Dinnes, Ashley Doss, Luther Cariker, Harry Brown, Alden Gragg, Byron Johnston, John Shultz, Raymond Nendel, James Nelson, Adolph Ste. Marie, Lawrence Wiley, Ralph Hilton, George McConnell, George Bailey, Andrew Anderson, Ernest Jones, William Nott, Gurney Newlin, Carl Blum, Lawrence Sweet, Perc Tallant, John O'Leary, Joseph Seelye, John Rojas, Bert Rico, Jr., Stewart Clemons, Patrick Gallagher, Clyde Mann, Harrison Dike, William Ralph, Charles Brundige, Roy Lemmon, Frank Faria, Yancy Paulson, Charles Brown, Vernon Taylor, George Reed and John Bouslog.

At the evening birthday dinner held in the California Club, 92 Union Oilers participated—a record number.

*The birthday celebrants, opposite page, were guests of the Research and Process Department at Brea during a morning tour and at lunch, upper left, in cafeteria. In top photo, President Reese H. Taylor is seen presenting a gold watch and service pin to Edward N. Campbell of Northwest Territory—one of 46 who received watches. Above, men of the Field Department, who have worked shoulder to shoulder for many years on Company rigs and leases, here reminisce at a California Club dinner table.*

# Pickin' Cotton

Story suggested by  
Union Oilers of Central Territory



CAN you imagine a machine of several tons walking through dense fields of cotton—taking into its steel-toothed mouth a continual row of plants—swiftly picking exposed cotton fibers, but refusing unopened bolls—and leaving in its wake hardly a trampled or damaged stalk?

Impossible though it seems even to an eyewitness, such a miracle is taking place hourly during the harvest season in hundreds of San Joaquin Valley cotton fields. The machine, called a mechanical cotton picker, is run by one operator and does the work of 30 or more hand pickers. Its fingers are metal spindles which spin as they are being rotated by a supporting mechanism—snagging and winding cotton fibers away from the stalk. The plant is otherwise untouched, permitting its closed bolls to mature and open for subsequent pickings.

Though hand labor still works side by side with these machines in some fields, it appears certain that mechani-

cal harvesters will soon dominate the job. Not since Eli Whitney invented the cotton gin in 1793 has this industry experienced a more revolutionary change.

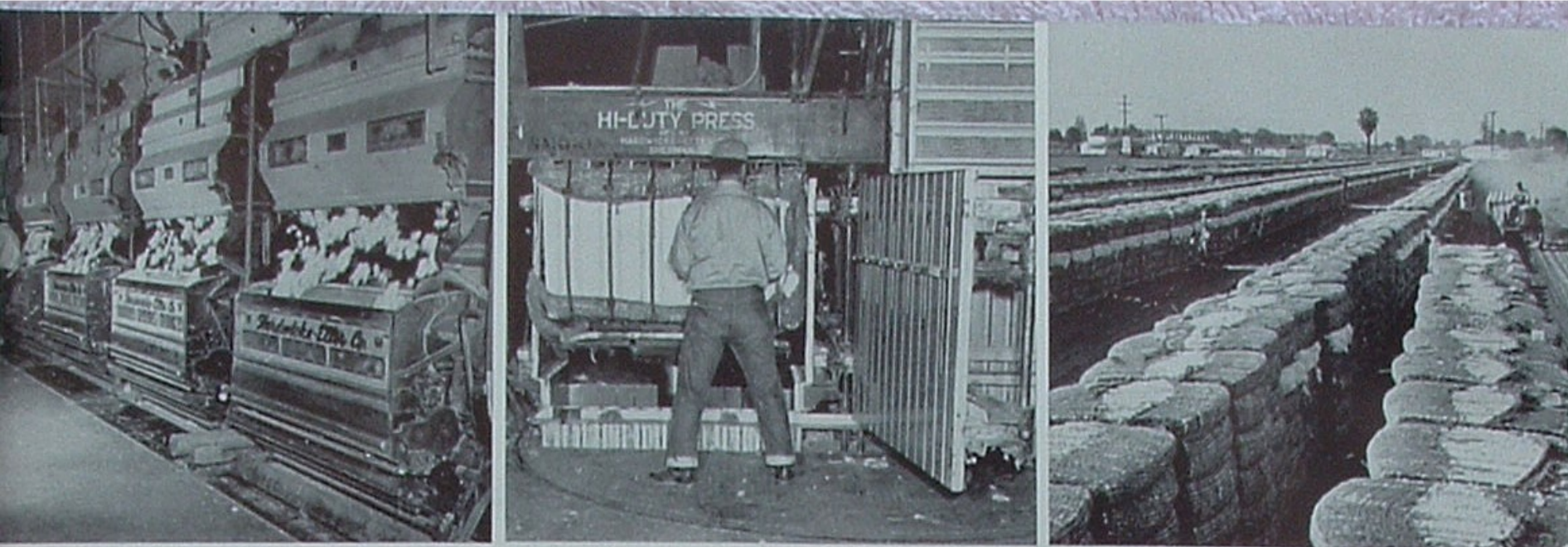
Like most new inventions, the cotton picking machine gave rise to new problems—among them problems of lubrication. Particularly, the spindles didn't perform very well with established spindle lubricants. They tended to rust and corrode. Operators reported a *drag* or resistance when starting the machines on cold mornings.

Union Oil, being keenly interested in this sizeable market for petroleum products, was one of the first companies to offer improvements. Our research men and engineers found they could manufacture a light-viscosity oil to reduce *drag*, mix it with a highly effective corrosion inhibitor, and thus end most woes of the mechanical picker. So, our Red Line CP (cotton picker) Oil and

*From left, a mechanical cotton picker deposits its harvest in the field for subsequent pick-up by a trailer; examining some of the 1952 crop are Driver Corbin Davidson*

*and Consignee Ben Shoemaker, Union Oilers of Hanford; at a gin of the Central Valley Co-op. near Hanford trailers are unloaded by air suction into system of piping.*





*From left, gin stands of the Central Valley Co-op. are in action separating seed from lint; while operators bind one bale of cotton with steel bands, another 500 pounds*

*is being accumulated and pressed in the bin at right; bales are stored on end in the open field, with water-filled oil drums nearby to offer assistance in case of fire.*

Unoba LG (liquid grease) are meeting with outstanding success both in California and Arizona fields.

It was while watching some of these lubrication tests that ON TOUR, with the help of Union Oil people of our Fresno District, gained a magnified respect for the cotton industry. You too may find some of the following facts surprising as well as interesting:

Until 1910, California was hardly counted among the cotton producing states. But in that year an 8,000-acre tract in Imperial Valley yielded 6,000 bales and gave California farmers something to think about. Moving gradually into San Joaquin Valley, the crop grew in importance until, in 1951, San Joaquin Valley alone produced 1,685,556 bales from 1,259,270 acres, or 99 per cent of California's total production.

It is significant also that in 1951 California, while ranking only seventh in cotton acreage, was second among states of the United States in volume of production. Here the yield averaged 750 pounds per acre, compared with a national average of 260 pounds per acre. No comparable area in the world has achieved such high production.

A principle reason for this western success is seed selection. Extensive tests proved the Acala variety of seed to be most adaptable to San Joaquin Valley soil.

Thereupon, all cotton men banded together in the California Planting Cotton Seed Distributors Association, a cooperative non-profit group. With the aid of a U. S. Department of Agriculture cotton breeding station at Shafter and state legislation to prohibit the planting of poorer varieties, they have clung to Acala seed and produced astonishing crops. Other factors have also contributed to this success, including favorable soil and seasons; scientific land preparation, cultivation and irrigation; protective crop rotation, fertilization and pest control; and large-scale, mechanized farming methods.

The San Joaquin cotton harvest, starting usually in late September or early October and continuing through January, is an absorbing study in wasteless efficiency:

The harvest, whether hand or machine picked, is loaded into trailers and towed to the nearest gin.

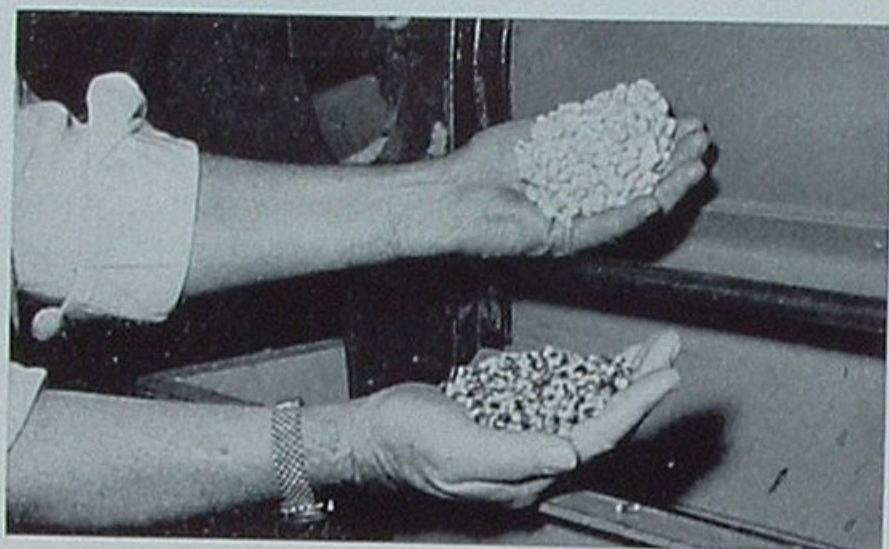
At the gin, field cotton is unloaded from trailers by suction; conveyed through a system of piping to cleaning and drying drums; then fed through the *gin stands*. Here lint and seed are separated, the lint proceeding on to a *condenser*, where it is formed into a *bat*, and then into a cotton bale press. A gin bale weighs about 500 pounds, but, to facilitate long-distance hauling, *compress* plants are in operation today which can further press such bales into one-half or one-third their gin size. Bales are identified with the grower's name, stored in the open

*Ranchers Cotton Oil Company of Fresno uses the hexane extraction method to process cottonseed oil. The lint, meal, oil and hulls from such plants—once considered waste products—now find thousands of uses in America.*





After being unloaded, above, into oil mill storage, cottonseed is sent through "linter" machines, right, where it is stripped of its lint covering and emerges almost clean-shaven. Its before and after state is shown below.



pending purchase, and guarded against loss or damage.

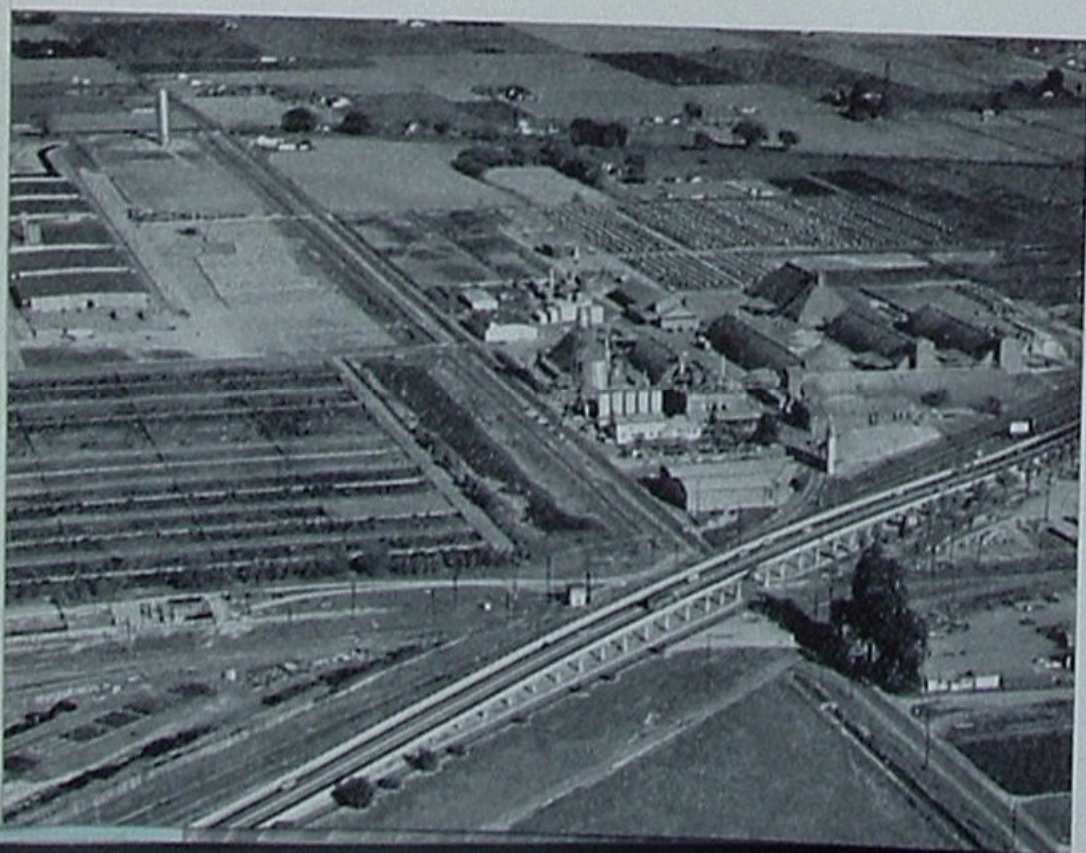
Formerly, cottonseed was burned or dumped into the nearest river as a bothersome waste product. But shortly after the Civil War a man named Dr. Wesson found he could press from the seed a high quality oil suitable for cooking or as a salad dressing. From that fortunate observation grew the modern cottonseed oil mill.

These oil mills are a combination of gin, threshing machine and refinery. The cottonseed is first sifted through a series of drums to remove sand, twigs and



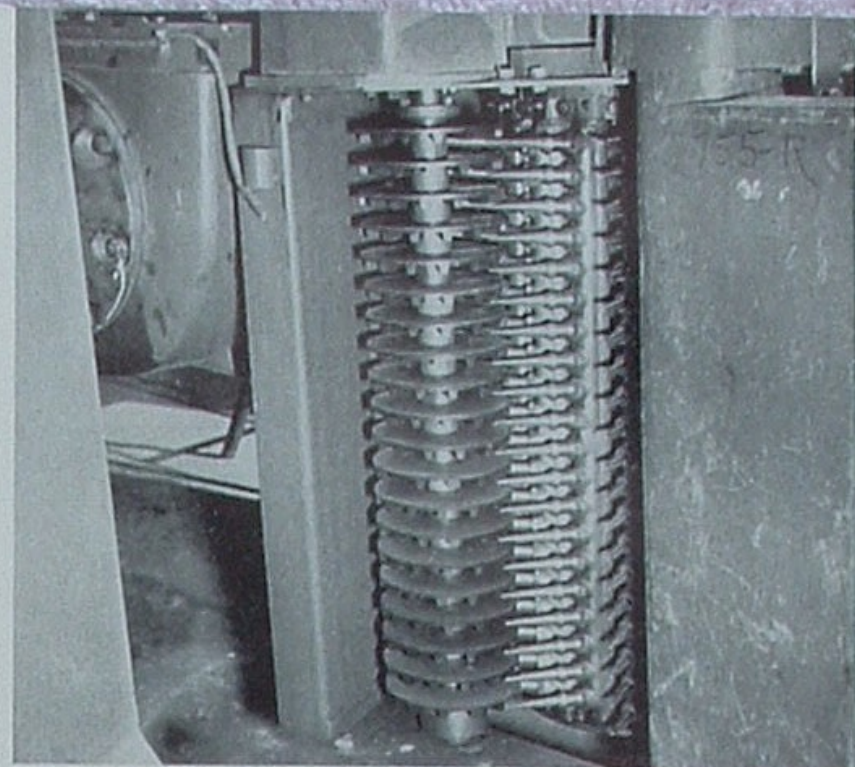
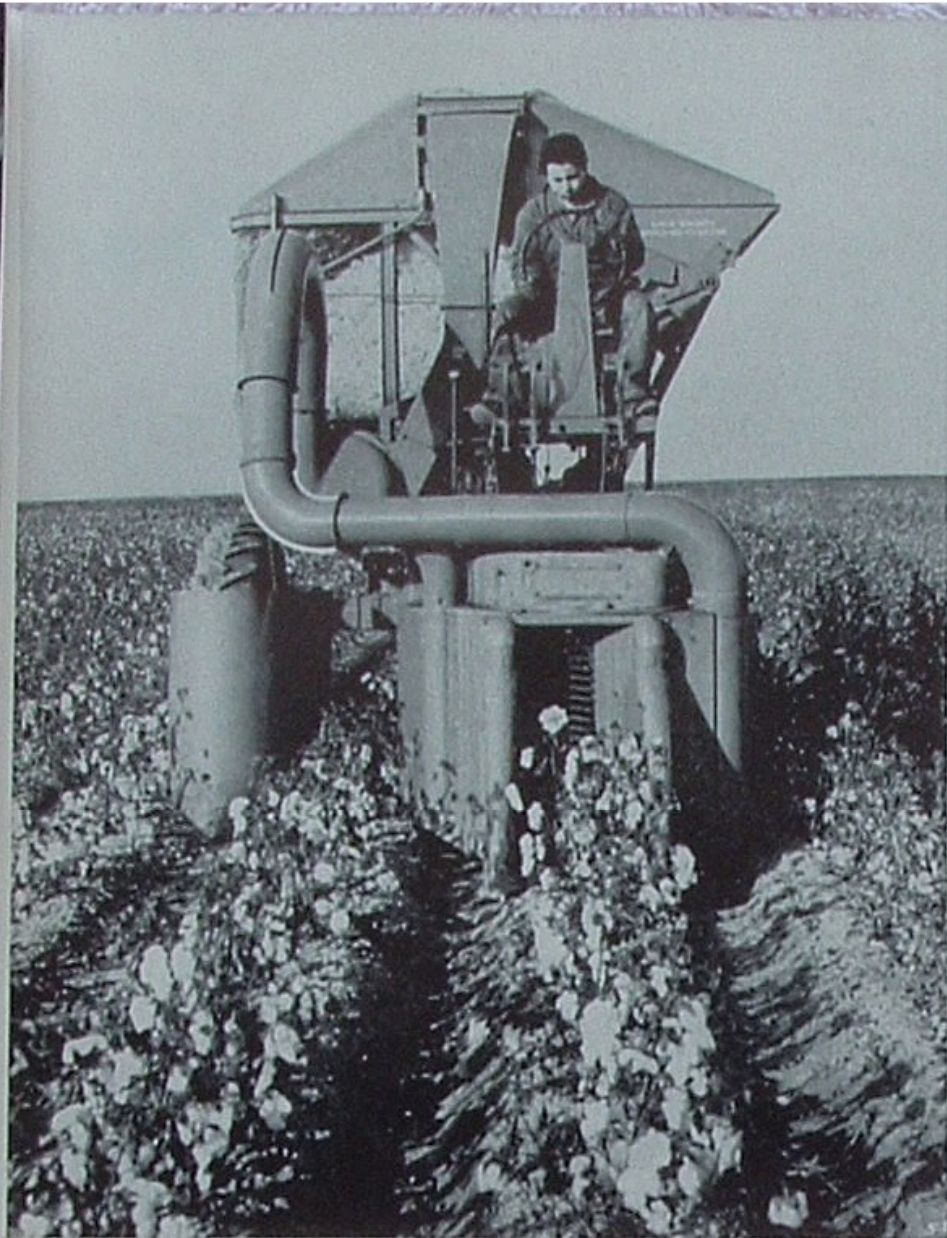
other debris; and is then sent to a battery of machines called *linters*, where each seed is shorn of the lint coat that surrounds it. Delinted seed next enters a *huller* for the separation of hulls and meats. And finally after a complicated process of rolling, cooking and pressing, the meats are made to yield their content of oil. Over 96 per cent of the oil contained in cottonseed is thus pressed out.

Refining of the cottonseed oil with heat and chemicals or solvents produces two cuts, one a *soap stock* used, as the name implies, in the manufacture of soaps; the other a light oil, straw-yellow in color, nut-flavored, and valuable as an ingredient of margarin, salad oil, vegetable shortening, cooking oil and numerous other products in daily American use.



Adjoining Producers Cotton Oil Company of Fresno are large beef cattle feed yards, lower left, where by-products from the mill are prized for their high-protein feed qualities. Such beef brings highest market prices.





*Cotton picking machines, such as the one at left, have presented a lubrication challenge. The picking spindles, above, tended to corrode and drag. But Sales Engineer E. M. McLachlan, below, testifies "We solved the problem."*



Nothing from the cottonseed oil mill is wasted. The lint is baled like other cotton and sold for hundreds of uses, including the manufacture of celluloid, other plastics, shatterproof glass, smokeless powder, photographic film, rayon, absorbent cotton and felt. Meats, after yielding their content of oil, are formed into cottonseed pellets and cakes. Containing 41 per cent protein, these by-products are an ideal food for stock and poultry, and are good for human consumption in the form of certain health breads.

Indeed, to Dr. Wesson the world owes a debt of gratitude. For, with each 500-pound bale of cotton some 750 pounds of cottonseed are produced. And from each ton of seed brought to the oil mill there are produced 175 pounds of lint, 850 pounds of cottonseed meal,

325 pounds of crude cottonseed oil, and 550 pounds of hulls, or a total of 1,900 pounds. The 100-pound loss is chargeable to impurities removed from the seed and to a small amount of processing blow-away.

Fifteen million Americans are gainfully employed either directly or indirectly in the cotton industry. To this surprising number Union Oil adds several score more—including the people introduced herewith—who are "pickin' cotton" in a big way by helping to power and lubricate the San Joaquin Valley cotton harvest.

*Union Oil "cotton pickers" of Fresno include, from left, Doris Patrick, Paul Ethridge, Herman Isheim, E. M. McLachlan, C. E. Keeler; Jeanne Bell, Carl Jordan, Harry*

*Whitaker, E. A. Cox and Josephine Savage of Credit Dept.; Angus Herold, John Kockos, Ben Lorimor, Donald Gustin, Jerry Doty, Bud Thorpe, Loren Russel and Wayne Tucker.*





During this ship and wharf fire at Oleum Refinery on July 12, 1952, many acts of courage were performed, resulting in the granting of awards to 15 seamen.

# Seamen Rewarded for

Union Oil Company  
of California

Awards this

## Certificate of Honor

to

Captain Torsten R. Fisher  
 Captain Henry J. Kostowal  
 Chief Engineer Charles E. Hesse  
 First Engineer Stanley M. Brookover  
 First Engineer Frank C. Dolcater  
 Second Engineer Elvin M. Zeller  
 Third Engineer Warren T. Murray  
 Third Engineer Elmer C. Kaiser  
 Third Engineer Eric J. W. Nelson  
 Able Seaman Otis H. Denney  
 Fireman-Watertender John F. Kelly  
 Oiler George Chatel  
 Oiler Carl H. Lans  
 Oiler John F. Stiens  
 Messman Richard M. Taplyn

who, on July 12, 1952, and in the finest tradition of seamanship, risked their lives to combat an oil fire and save their vessel. The courage and presence of mind displayed by them on that occasion were important factors in minimizing property damage and loss of human life.

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At San Francisco, Captain Torsten R. Fischer, center, receives the thanks of Union Oil Company through Captain J. B. Stene, left, and C. E. Rathbone, Territory manager of retail sales.

From left, Richard Taplyn, George Chatel, Captain Henry Kostowal, John Stiens, John Kelly, Elmer Kaiser and Carl Lans are credited with saving the SS LOMPOC from greater damage.





## ded for Valour

So reads the scroll presented during November to seamen of the tankships *Victor H. Kelly* and *Lompoc* who, despite great danger, exceeded the call of duty in trying to save their vessels. In addition, each of the 15 named was given a check in the amount of \$1,000.

It being impractical to recall the men from widely scattered ships or ports where they now work or reside, no formal presentation was arranged. Nevertheless, a token ceremony was held at our Central Territory office in San Francisco on November 6th. Captain J. B. Stene, Union's manager of marine operations, voiced the Company's gratitude to the entire crew through their senior representative, Captain Torsten R. Fischer.

Captain Fischer, a veteran of 50 years at sea—30 years aboard Union Oil tank ships—accepted retirement early in 1950. But salt water soon beckoned him to the role of docking master on San Francisco Bay. It was while serving in this piloting capacity aboard the *Kelly* that his courage and half-century of training were put to the test of fire. With the ship's master stricken fatally by a heart attack, Captain Fischer directed the crew in a heroic attempt to break their burning ship loose from the wharf. He kept trying even after the forward deck had ripped open from an explosion. The aft welldeck was bulging before he ordered the ship abandoned. After diving overboard and swimming to a tug, the 67-year-old skipper returned to pick up survivors and otherwise assist throughout a 16-hour ordeal.

Similarly valorous were the efforts and accomplishments of the other 14 officers and crew members.

Union Oil's only hesitancy in presenting the awards was prompted by the realization that there are possibly others deserving of recognition in equal or slightly lesser degree. To all who assisted in any manner during the emergency the Company is deeply grateful.



*Reviewing a humorous episode of the fire with Captains Fischer and Stene (seated) are Union Oilers, from left, W. V. Criddle, C. E. Rathbone, J. J. Grunevald, Captain L. L. Lishman and R. T. Carrington of San Francisco.*



*"Gee, a thousand dollars!" exclaimed Marilyn Wright as she and Betty Tibbe, left, examine awards to Captain Fischer. Both are San Francisco employees.*



*From left, Warren Murray, Elvin Zeller, Charles Hesse, Stanley Brookover and Eric Nelson were cited for their courageous attempts to free the *KELLY* after her foredeck exploded.*

# Essayists Honored at Oleum

From John Pollen

*At left, receiving defense bonds from Refinery Manager G. H. Hemmen are, l-r, David Clark, Billy Law, Pat Nelson, Dwight Clark, and Sharron Hoover, finalists in the essay contest.*



*One of the essay champs, Billy Law, is the son of our Oleum blacksmith, William Law—now mutual admirers.*



*Another bond winner, Dwight Clark, carries the good news to his father, Harold Clark, Oleum lab supervisor.*

OIL PROGRESS WEEK, October 12 to 19, attracted deep thinking as well as a large and youthful audience this year in the vicinity of Oleum Refinery. Union Oilers here used the effective strategem of spreading oil information by sponsoring an essay contest.

To the high school and grammar school students of Crockett, Rodeo, Pinole, Selby, Hercules and Port Costa they propounded two questions: "What does Oil Mean to You?" or "How do Petroleum Products Help in Your Daily Life?"

The contest was divided according to age groups into seven sections, and there was a special contest for the children of Oleum Refinery employees. Top prize was a \$100 defense bond. But in addition there were four \$50 bonds and several handsome pen and pencil sets for the near-winners. All a guy had to do to win was "Write a better essay'n anybody."

Surprisingly, some 350 children responded with masterful themes on petroleum. Then, on October 16, the winners, accompanied by parents, school officials and



*All in all it was a prideful day—students were proud of their essays and awards—parents and teachers were*

*proud of the children—and the people of Oleum Refinery were mighty proud to play host to such talented visitors.*



*Sidney McClung, Anne Giddings and Sherman Eaton, all from the Rodeo School District, feel that the next contest will be a cinch—what with new sets of writing tools.*



*Winners (seated) Gerald Del Agostino, Sharon Hoover, Blake Holtzclaw, Mel Freitas, (standing) Barry Engrahm, Dan Dempsey, Ray Vallejo and Pat Nelson are from Crockett. Below are those who took part in the award luncheon.*

members of the Oil Industry Information Committee, came to Oleum for their awards. First they were taken on a bus sight-seeing tour of the refinery. Then at a special award luncheon in the refinery cafeteria, the winning essayists were presented with their bonds and other prizes.

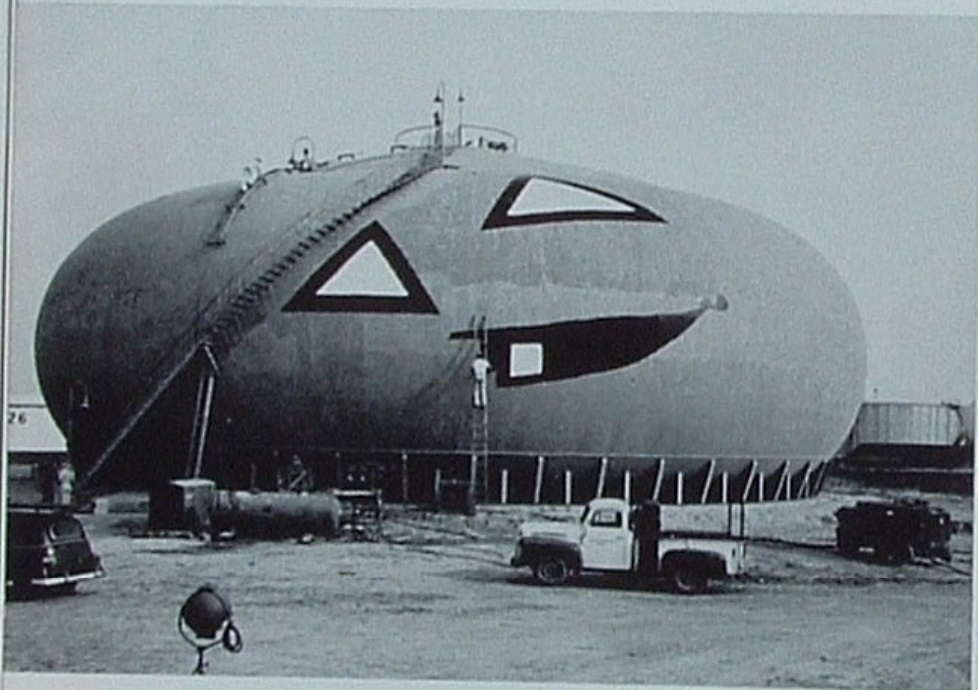
It was a happy experiment in public relations, and brought to the sponsors a bolstered confidence in our coming generation.

ON TOUR





*Designing the world's biggest jack-o-lantern above are, from left, Charles Henderson, Jean Schaffer and Artist Francis Okerstrom, three of many Los Angeles Refinery people who offered their ideas and Halloween services.*



*Above, workmen are shown in the middle of a most extraordinary painting job, which at night, below, was viewed by thousands of motorists and millions of TV fans.*



## Some 'unk

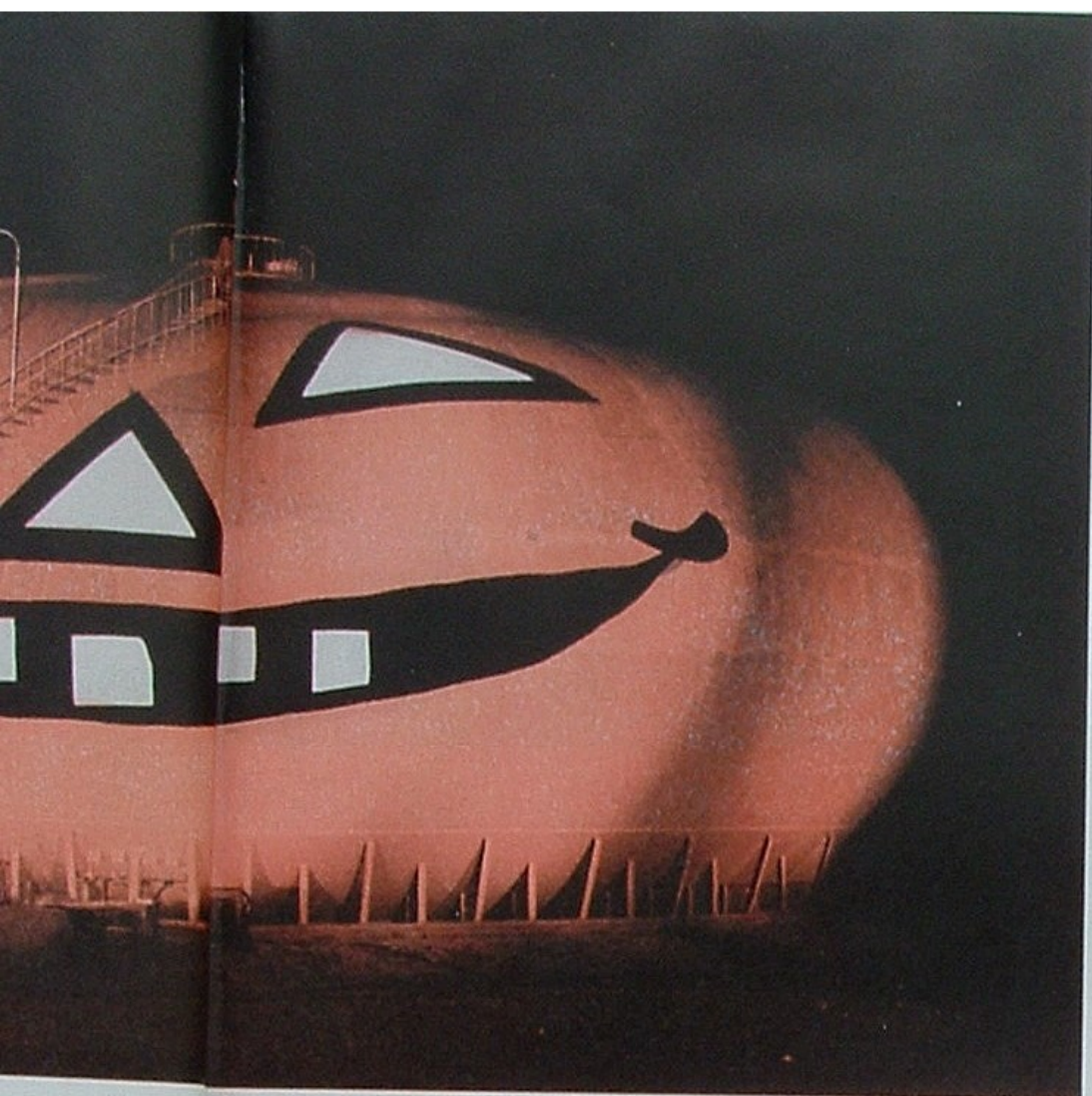
NO sooner had painters applied the prime coat of red-lead paint to Los Angeles Refinery's new Hortonsphere than dozens of people began exclaiming, "Why, it looks like a pumpkin!"

Well, it was only a day or two until Halloween. So, Paul called Les. And Les called Elmer. And Elmer called Earl. And Earl called Haines. And Haines called Reese. And, before anybody could convince 'em the idea was crazy, these boys had authorized and engineered the biggest jack-o-lantern this world has ever seen. Its eyes and nose were some 18 feet high, its mouth 73 feet long, and its teeth four feet square. By day—and even by night with the aid of lights—its grin could be seen from a distance of several miles across Los Angeles County.

Newspaper men came running by the dozens. Magazine photographers shot it from every angle. Television cameras carried the image to millions. Newspapers, newsreels and radio stations gave it front-page importance despite the presidential campaign. Probably enough gasoline was consumed by motoring spectators to nearly equal the tank's 80,000-barrel capacity.

But, with Time, off even its pu fills only at no one. about its p

Round o stand great Spheroids for storing will not re pressure. engineers build in l such vesse accommod sphere and cylinder. Pacific Co natural ga square inc



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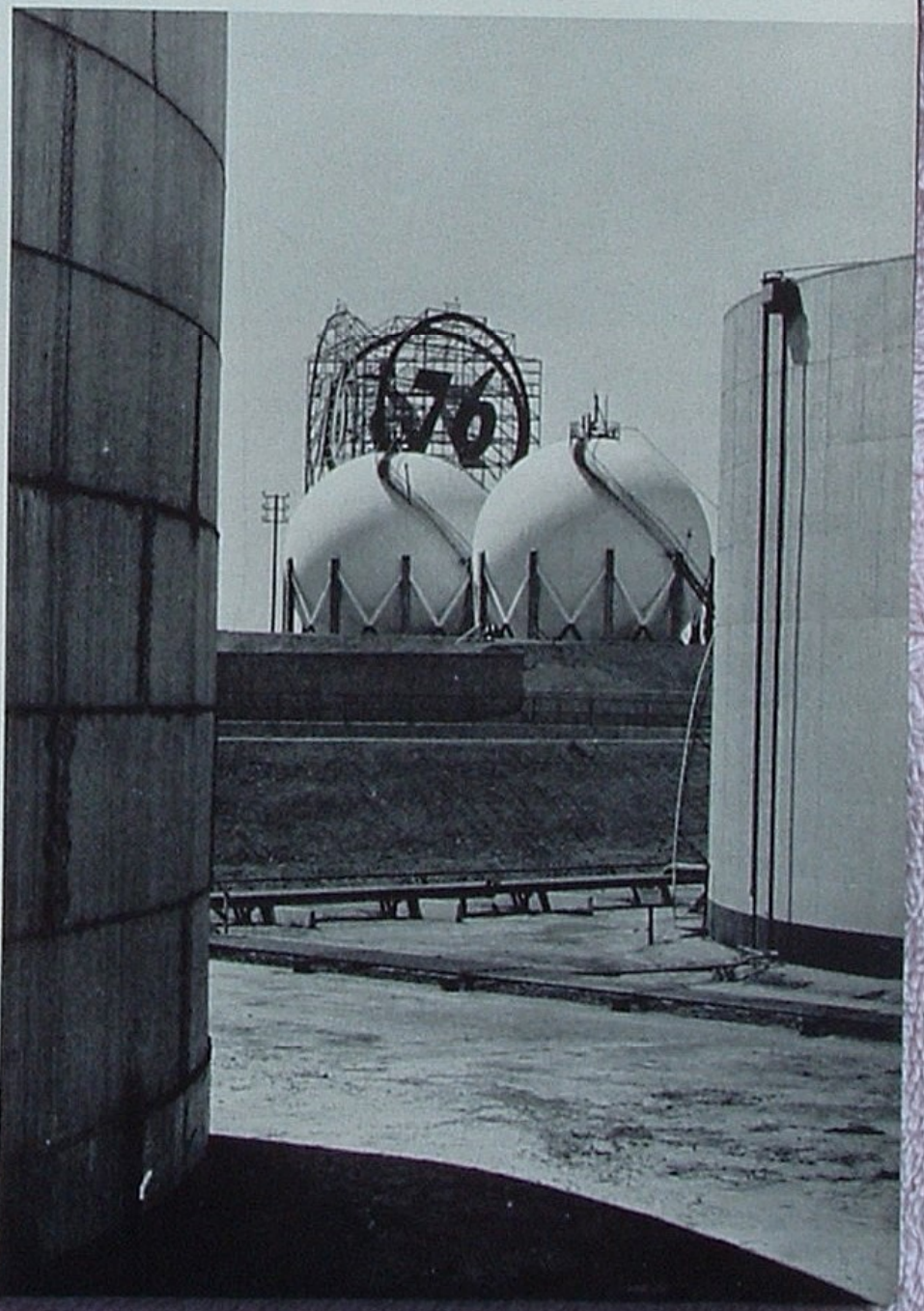
But, with Halloween out of sight down the river of Time, off went the jack-o-lantern's painted features and even its pumpkin color. Today garbed in white, it fulfills only the purpose of its creation, and makes faces at no one. Occasionally, though, people stop and inquire about its pumpkin-like shape. This is their answer:

Round or spherical tanks have the strength to withstand greater internal pressures than do cylindrical tanks. Spheroids therefore are used by the petroleum industry for storing light oils that vaporize readily or gases that will not remain in liquid form unless held under high pressure. Perfectly round tanks are the stoutest, but engineers have found them impractical and costly to build in large sizes. Accordingly, they have designed such vessels as this "Noded Hortonsphere," which can accommodate a much larger volume of product than the sphere and withstand greater internal pressures than the cylinder. Tank No. 304, the largest of its type on the Pacific Coast, is being used for the storage of stabilized natural gasoline under pressure of about 6 pounds per square inch.

ON TOUR



*With Halloween of 1952 off down the river of Time, the big Hortonsphere quickly shed its masquerade garb and assumed a workaday place among tanks of LAR's farm.*





*Above, with a safety rope tied to his waist, a fisherman awaits the pull of his net by another 30-pound salmon.*

*Above right, fishing from a platform handed down to him through several generations, an Indian boy nets a big one, strains mightily to swing it ashore, and completes the catch with a wooden club—his third fish in five minutes.*

*Right, opposite sides of the stream at Celilo Falls call for different techniques of net fishing; there is hardly a dull moment when the salmon are running; and every rock perch in the area supports a platform. Indians are allowed to take fish out of season for their own subsistence, but during the open season may sell them commercially.*



## Salmon Harvest on the Columbia

Suggested by Union Oilers  
of Portland District



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EVERY autumn without fail, millions of salmon return from the North Pacific Ocean—unerringly locate the Columbia River's broad mouth—migrate far upstream to the shallow pools where they were hatched—and, after spawning a new generation of their species, die.

Long before the West was settled by whites, Indians of the Umatilla, Yakima, Nez Perce and other tribes used this up-river migration to great economic advantage. Their fishing was done principally with spears and nets. One man could easily catch a ton of salmon a day. The fish were preserved as a winter food by being dried and smoked.

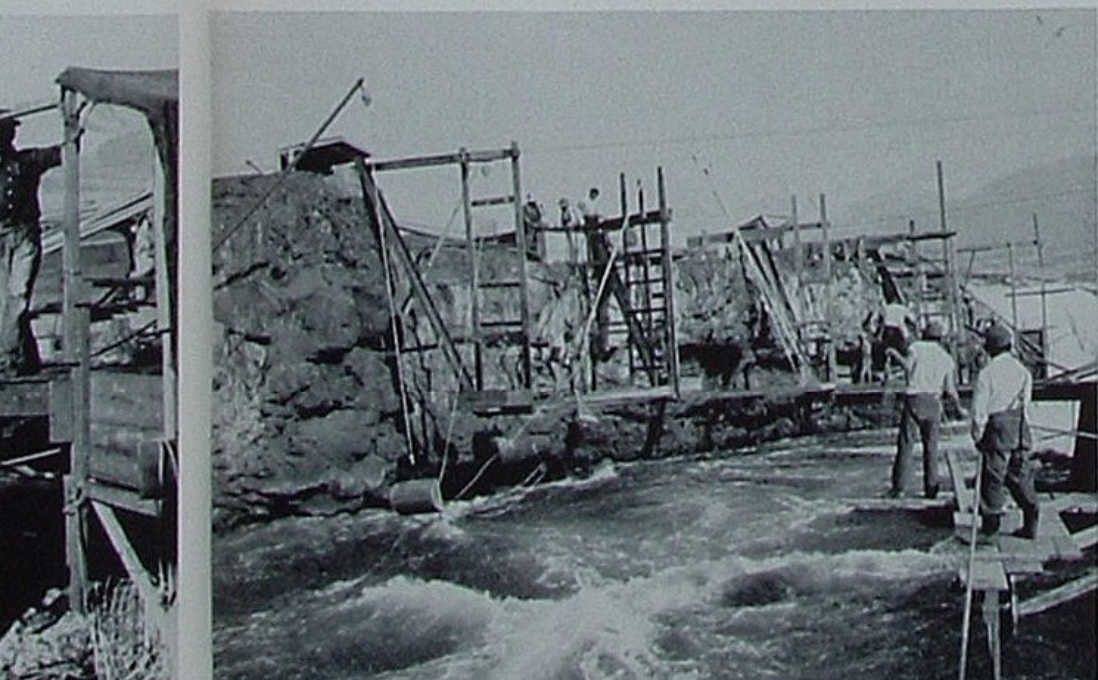
Celilo Falls, a few miles above The Dalles, Oregon, was the Indians' favorite fishing place. Here, where the blue Columbia tumbles through dozens of narrow, rocky gorges, the Red Men invented a system of property rights and guarded it jealously. Individual families were allotted a large rock or other well defined portion of the river bank. The family patriarch decreed who could or could not use the site for fishing. Ownership passed

from father to son, generation after generation. And one of the severest tribal punishments was to take a fishing site from one member and assign it to another.

Despite the coming of white men in great numbers around 1850, this ancient Indian practice did not change. A treaty signed by these tribes in 1855 with the Great Father of the United States confined the Indians to reservations, but did not tamper with their salmon rights.

So in 1952, motorists taking an autumn trip along the Columbia stopped to view and photograph one of our few remaining links with primitive American life. The fish could hardly have been more plentiful 200 years ago. Day and night the Indians—young and old—worked from ancient fishing sites, blissfully unmindful of seasons, limits and licenses.

But as ON TOUR was filming the cover photo of Celilo Falls, even this scene was changing. Soon a white man's dam below the falls will mean money in the pockets of fisherman landowners, but an end to their colorful type of fishing. Within two or three years, Indians may be fishing from less private sites.





# INDUSTRIAL SUMMARY

## ● TRANSPORTATION & DISTRIBUTION

Increased sales demand has compelled us to transfer 11 additional tank cars from Seattle to Whittier, Alaska, in order to maintain petroleum supplies at Anchorage, Fairbanks and other points on the Alaskan Railroad. The additional equipment will give us a fleet of 50 tank cars operating out of our marine tankship terminal at Whittier.

Recently, 32 Company owned vehicles in the Coast Division area were converted from the use of gasoline to liquefied petroleum gas as motor fuel. This move, in addition to economics to be effected, was prompted by the ready availability of the LPG fuel and because of the success realized from previous similar conversions in other areas. Gasoline carburetion is not disturbed by this installation and when the vehicle is transferred or LPG is not available gasoline can be used. Principal equipment involved in the conversion consists of a new carburetor pressure regulator, and fuel tank.

*from Ronald D. Gibbs*

## ● COMPTROLLER'S

At the meeting of the Board of Directors held on October 27, 1952, Charles F. Parker was elected an assistant comptroller of the Company. In this capacity Mr. Parker will continue to direct the activities of the Economics Division and will be assisted by J. E. Arens, supervisor economics, and W. H. Buell, chief economic analyst.

*from Irving J. Hancock*

## ● INDUSTRIAL RELATIONS

Interest in supervisory development continues to spread throughout the Company. Evidence of the returns to be realized through informed supervision is apparent in the eight major locations of the Company where programs are in existence.

Additional recognition has recently been accorded this activity by the establishment of a Supervisory Development Committee of the American Petroleum Institute. G. G. Chapel of the Union Oil Company is active in the early efforts of this national program.

The Safety Board reviewed with concern the increasing number of accidents involving employee and Company owned vehicles. These accidents too frequently result in serious personal injury or death. At the Board's recommendation the Executive Committee has approved immediate construction and staffing of a mobile driver training unit which will tour Company operating areas to help employees become safer drivers.

*from W. C. Stevenson*

## ● MANUFACTURING

Oleum Refinery has made an initial shipment of asphalt in a rather novel container. The delivery of hard asphalts to a remote area has in the past been confined to use of barrels. Our customer's new container is a steel tank holding 3,000 gallons of asphalt. Three of these containers can be carried on a railroad freight car and after arrival at the rail or pierhead can be further transported to the final destination. These containers are equipped with steam coils for reheating of the asphalt before use, and after emptying can be returned to the refinery.

During November the new sulfur plant at Los Angeles Refinery commenced operation. This plant can produce 46 tons daily of elemental sulfur from hydrogen sulfide. The process in brief converts gaseous hydrogen sulfide, produced at the various cracking units, to elemental sulfur by burning part of the hydrogen sulfide with a controlled quantity of air to form sulfur dioxide which is then reacted with gaseous hydrogen sulfide in the presence of a catalyst to form elemental sulfur. The sulfur is kept in a molten state at a temperature of about 300°F. in which form shipments are made. Prior to the building of this new sulfur plant, the refinery shipped hydrogen sulfide to an outside chemical plant for processing.

*from K. E. Kingman*

## ● PURCHASING

In all contacts by Purchasing with operating departments, the importance of standardization of materials as a tool for inventory control is constantly emphasized. Whether



we consider tubular goods, containers, heater tubes, chemicals or any class of material continually purchased in large quantities, standardization results in a reduced number of items in stock, better availability, less cost and lower investment.

Standardization demands cooperative efforts. It must start with the original design of a new project and be carried on by special investigation during the entire period of its operation and maintenance. It requires the combined skills of engineers, chemists, purchasing and operating personnel and suppliers.

Purchasing Department organization is set up to pass on to all locations within the Company the latest information on standardization activities. Twice a year district purchasing agents from Los Angeles, San Francisco, and Seattle, together with purchasing personnel as required from Glacier, Texas, and other points, meet to discuss mutual problems. At the September meeting, standardization as a tool for inventory control was the principal topic for discussion. We solicit the cooperation of all departments in furthering this aspect of more efficient and economical operation.

*from E. H. Weaver*

● **FIELD** Drilling by the Field Department so far this year has developed production in twelve new areas or zones. There was no Company production from these oil reservoirs prior to 1952. Six of these operations are in California, four are in West Texas, and two are in the Gulf Division. The California petroleum reserves will show the greatest gain from this exploratory and development drilling.

Operations have already been budgeted for the first six months of 1953 and exploratory drilling, even more aggressive than in 1952, has been scheduled. It is planned to drill a total of forty-five wildcat wells with eleven each programmed for California and the Gulf Division—wildcat wells are also planned for Western Canada, West Texas, the Rocky Mountains, and the Williston Basin. The state of Oklahoma has been added to the roster of states for wildcat wells and two exploratory tests are scheduled here for the first half of 1953.

*from Sam Grinsfelder*

● **RESEARCH AND PROCESS**

John L. Broughten, senior research chemist, presented a paper entitled, "An Electron Looks at Detergent Oils" at the Society of Automotive Engineers National Diesel Engine Meeting, held at the Chase Hotel, St. Louis, Missouri, October 30-31, 1952. The paper emphasized the potential utility of the electron microscope as a tool in the evaluation of compounded crankcase lubricants, and related particularly to studies conducted on railroad diesel engine lubricat-

ing oils which have stimulated considerable interest in the industry.

Vance N. Jenkins, research supervisor, who for the past 18 months has been on special assignment reporting to Mr. W. L. Stewart, Jr., on air pollution matters, has been named executive secretary of the Smoke and Fumes Committee of the American Petroleum Institute. This committee, of which Mr. W. L. Stewart, Jr., is chairman, was organized for the purpose of furthering studies of the nature and origin of the air pollution existing in certain heavily populated areas, in some of which the petroleum refining industry operates and in all of which a great number of automobiles are operated.

*from C. E. Swift*

● **MARKETING**

Progress for the year 1952 shows sales of 7600 17% higher than in 1951 and 7600 comprised 47% of the total motor gasoline sales. Our motor oil sales were up 10%, with industrial oils showing a 30% gain. These increases, together with a 5% increase in grease sales, make an across-the-board gain for our lubricating products.

Retail sales through our leased service stations have shown a consistent gain over the past four years, with an average monthly gallonage increase of 15.6% for the period. For the same period the number of credit cards accounts has increased 74%.

Of the vast military supply requirements on the Pacific Coast, Union supplied more than 11%. A recent bid award insures that Union will supply a continuing large percentage of the Navy Special Fuel Oil requirements, as the award was for 2,000,000 barrels of this product for delivery during the first half of the year 1953—two-thirds of the total contracted at this time.

A contract has recently been received covering sales of more than two and one-quarter million gallons of Fog Oil during the 12 months ending October 31, 1953. Fog Oil is a heavy low V.I. lube distillate used for the generation of smoke screens in military operations.

During 1952 the Refinery Sales group sold a total of 7,800,000 gallons of lubricating oils of all types which was divided between the eastern market, west coast jobbers and refiners, and sales to the U. S. Government. This represents an increase of 60% over similar sales in 1951.

In November we were successful in securing the largest asphalt order placed by the Republic of Costa Rica since 1945. This paving and cutback asphalt will be used for improvement of the highways in that country.

We have signed Distributor agreements covering the Ogden, Utah, area, and the Salt Lake City area, and will be marketing our gasolines through retail units early in 1953.

*from Roy Linden*

## Union Oilers



▶ **AT PORTLAND** Union Oilers J. W. Hastings (identified at speakers' table) and H. W. Bragg (seated directly in front of standing speaker) were key figures in presenting, at a Portland Chamber of Commerce luncheon during Oil Progress Week, a forum program entitled "Oil in the Public Eye." Hastings, superintendent of our Edmonds Refinery, was one of the forum panel; and Bragg, our district sales manager at Portland and also state chairman of the Oil Information Committee, was credited with arranging the program.

## CITED FOR OUTSTANDING SERVICE TO THE PETROLEUM INDUSTRY ARE:



◀ **AT SEATTLE** Our Resident Manager Carl Cole (center), who is also an Oil Industries Committee chairman, called upon Mayor Allan Pomeroy of Seattle, left, to explain the objectives of Oil Progress Week. The Mayor then signed a proclamation pointing out the importance of petroleum to civic and national welfare. Seen assisting Cole in his public relations sales assignment is Branch Manager James Lane of Standard Oil Company.



▶ **AT SAN FRANCISCO** Resident Manager R. T. Carrington (standing at left), who is an area vice chairman of the Oil Information Committee, and Ben T. Anderson, our assistant manager of Research at Brea, (seated

third from right) took prominent part in an October 12 television forum dealing with petroleum questions. The forum panel on this occasion was interrogated by three students from the City College of San Francisco, at left.



▶ **AT CHICAGO** Superintendent C. W. Froome of our Ventura Division was recently awarded an American Petroleum Institute "Certificate of Appreciation" in recognition of his "meritorious service to the industry." He was specifically singled out for his "constructive work on the Institute's standardization program, and drilling and production practice." He is seen above receiving the official citation from J. C. Donnell II, chairman of the General Committee of the Division of Production.

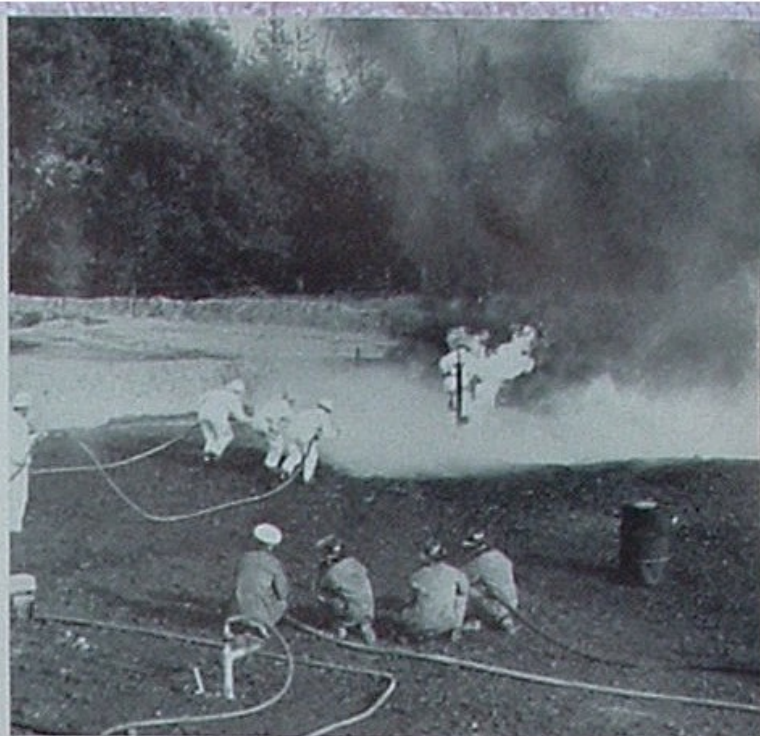
from Oil Information Committee



▶ **AT LINNTON, OREGON** Petroleum firms, including Union Oil, presented the public with something in addition to information on October 8. Their gift was the design of a fire training ground where municipal and rural firemen of that area might improve their skill and teamwork, particularly in dealing with oil fires. A two-acre site was pro-

vided by the Bonneville Power Administration and the Portland General Electric Co. Engineering and construction projects were shouldered by a number of West Coast oil companies.

Dedication exercises, attended by several hundred spectators including Mayor Dorothy McCullough Lee of Portland, were highlighted by demonstrations of fire fighting.



▶ **AT COUTTS, ALBERTA** Union Oil Consignee Joe P. Jordan (seated in front row second from left), who in his spare time serves as Mayor of Fort Benton, Montana, took leading part in the September 4th unveiling of a Canadian historical monument. The shaft and plaque, shown at right beside Lt. Governor John J. Bowlen of Alberta, commemorates the old

Fort Benton-Fort Macleod Trail over which freight, prior to the building of railways, moved up from the Missouri River, across Montana and into the Canadian plains. Dedication speakers, besides Mayor Jordan, included, from left, Professor M. H. Long, Lt. Governor Bowlen, Major J. A. Rosewarm and Senator W. A. Buchanan.

from Helen Chamberlain

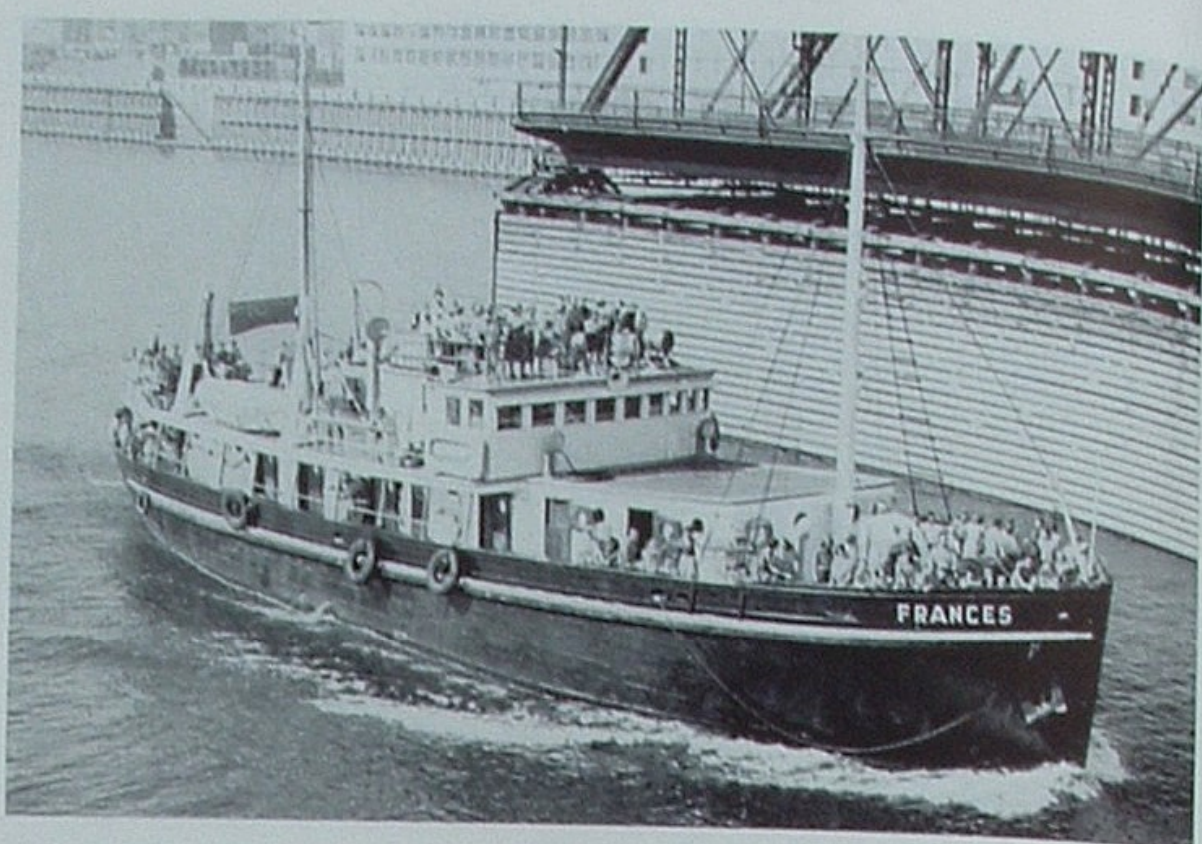
▶ **AT LOS ANGELES** District Superintendent L. S. Kelsey, left, of Union Oil was co-speaker with H. H. Kaveler of Phillips Petroleum at a district meeting of the American Petroleum Institute. His fine talk on the operation of bottom-hole pumps was backed by 22 years of field experience.

from the API



ON TOUR





▶ **ON THE WILLAMETTE,** one Sunday afternoon during the recent Indian summer, occurred some of the year's best sales navigating. With the avowed intention of treating all Union Oil families in the Portland area to a cruise down the

river, local management got all passengers aboard before striking their real intentions and colors. It seems that a certain Gridiron Sales Classic was getting underway in Northwest Territory, and every man, woman and child on the river was needed to bring home the booty. Since none

of the shanghaied salesmen elected to walk the plank, the recruitment was declared 100 per cent successful. At left, are R. S. Bond, W. S. Newton, H. W. Bragg, George Trimble and J. T. Raabe, ringleaders of the enterprise.

from Gudrun Larsen

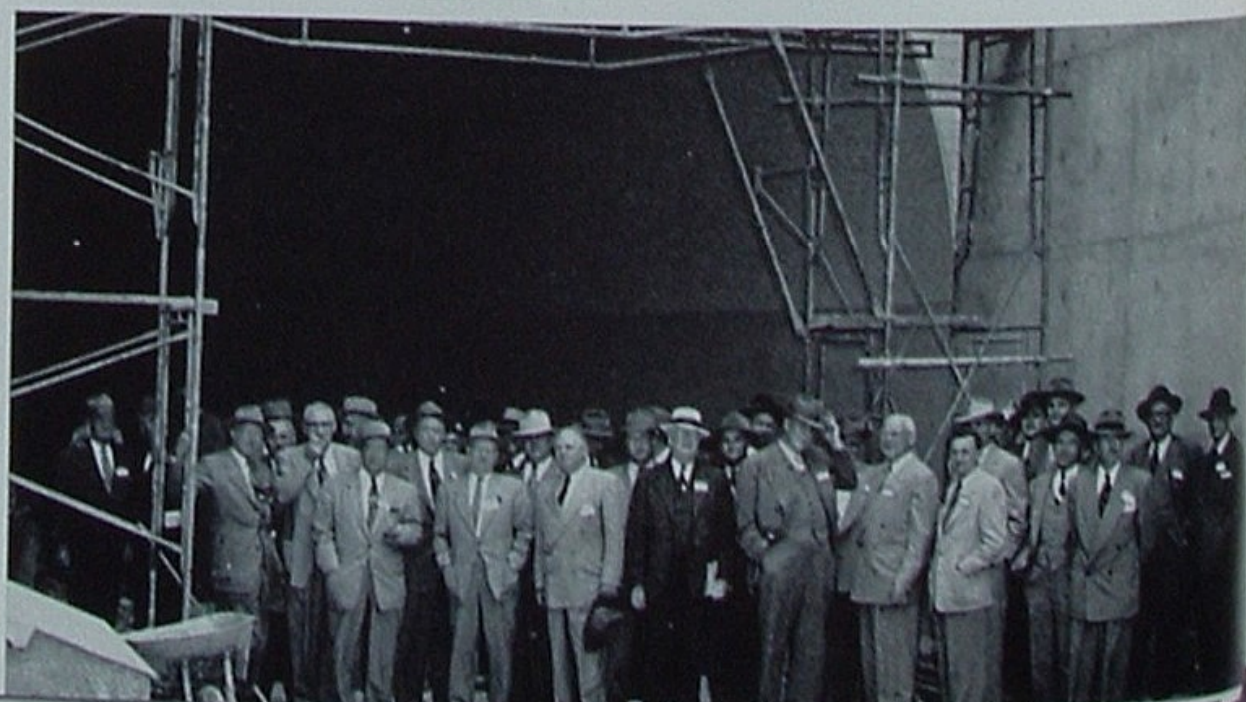


▶ **MAGICIAN** Car Dealer Representative Joe Young of San Francisco kept 'em guessing at the Pacific Purchaser Advertisers' Exposition in October of this year. His spic-and-span Triton display featured a large stream of our purple motor oil pouring continually from a big can into the little one. When asked why the little can didn't run over, Joe gave 'em everything in his briefcase except the right answer. Just between us folks, the purple stream conceals a glass tube and oil flowing back in the opposite direction.

from R. T. Carrington

▶ **AT FREEWAY PREVIEW** Guests of the San Francisco Chamber of Commerce on a September 17th inspection trip of new freeway projects were members of the California Highway Commission, representatives of the Division of Highways, and an oil industry delegation consisting of J. J. Grunewald, T. W. Proudfoot, R. T. Carrington and J. H. Rogers.

from Ethel Cline





➤ **AT FOREMEN'S DINNER**

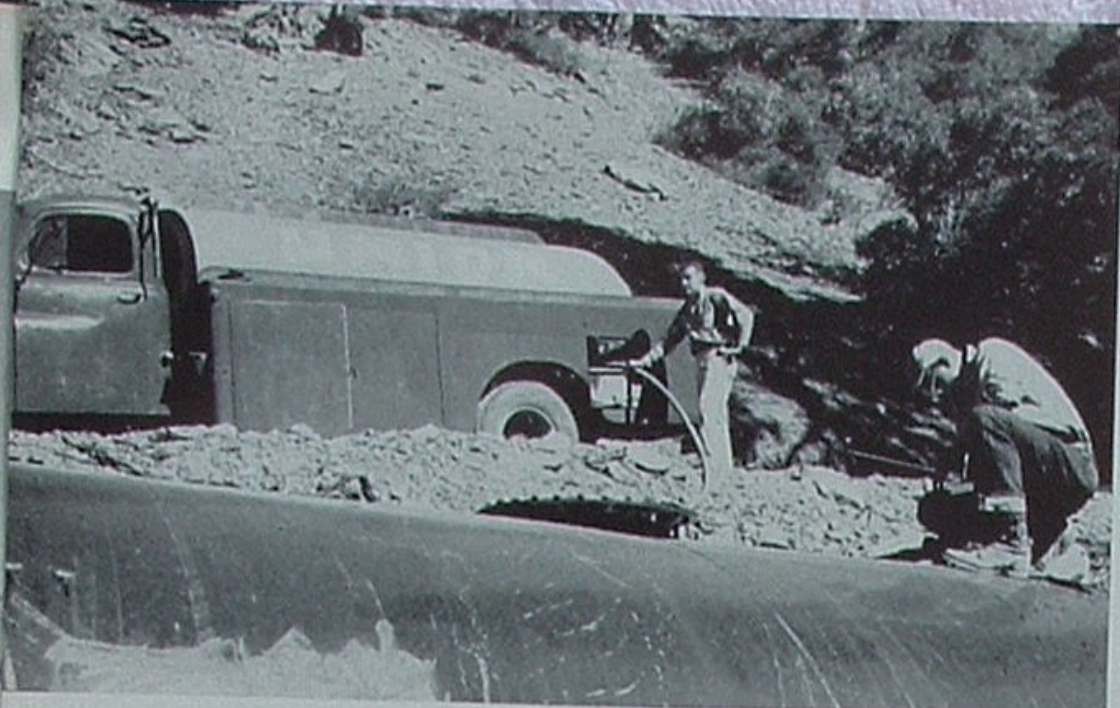
The Los Angeles Refinery foremen held their annual dinner at the Lafayette Hotel in Long Beach on October 24th. William P. Field, the association's president, (upper right) presided. The "Planning Bored," consisting of (above from left) Ed Genter, Phil Fawcett, Ray Cook, Bob McKean, Ben Gage, Bill Creswell and "Steno" Cliff Evans made some startling contributions to the advancement of refining. Guest speaker of the evening was Executive Vice President W. L. Stewart, Jr. (standing at right), who introduced his remarks with several memories of once having been a refinery pipefitter.



➤ **FIRST LINE OF DEFENSE**

At Avila has been formed a unique Observation Post of the Ground Observer Corps. All members of the post are Union Oilers of our Pipe Line and Transportation Department, Northern Division. In line with Civil Defense programs, it is their responsibility to report via telephone to Pasadena the movement over Avila of all airplanes, airplane formations, balloons and other flying objects. In the group at left are Roy Norick, Chief Observer William Mercer, Supervisor James McMillan, Patrick Brown, Perry Martin, Charles Caldwell, John Gorman and Frank Rose. They and 31 other Union Oilers are becoming adept at identifying airplanes either by sight or sound.

from Nick Ugrin



**▲ A JUMP AHEAD OF WINTER** High in the San Gabriel mountains Union Oiler Ralph Karesh of Ontario filled up a 5,000-gallon diesel fuel tank as if anticipating snow. A few days later, tank, roads and most of Mt. Baldy were snowed under—proof of excellent timing.



**▲ BAKED A CAKE** Because two of our favorite fellow-workers were retiring, folks at Orcutt baked a cake. It was just an old-fashioned American way of telling Leslie Holland, left and Henry Kinkade how much we'd miss 'em after their 55½ years of combined service.

from Bernie Bryson

**▼ OLEUM'S BEST** Champions of the Oleum Trophy Golf Tournament for 1952 are, from left, George Baumgartner, low net; Virg Oyler, second low net; Kaye Crowell, low gross winner for the second time in a row; and Henry Dubetz, second low net.

from John Pollen



# On Tour

VOL. 15, NO. 1  
JANUARY 1953

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T. D. Collett..... Editor  
R. C. Hagen..... Asst. Editor

ON TOUR is published monthly by Union Oil Company of California for the purpose of keeping Union Oil people informed regarding their company's plans and operations. Reader participation is invited. Address communications to ON TOUR, 617 West 7th Street, Los Angeles 17, California.

# Retirements



## SERVICE BIRTHDAY AWARDS

A grateful Company and host of well-wishing employees are bidding farewell to the following Union Oilers who have concluded long careers of Company service and are retiring:

JANUARY 1953

### CHESTER H. ANDERSON

Field Department  
Employed 4/14/26—Retired 11/1/52

### GLENN H. CAPPS

Los Angeles Refinery  
Employed 5/28/29—Retired 1/1/53

### GRANVILLE E. JONES

Southwest Territory  
Employed 4/23/18—Retired 1/1/53

### JAMES C. NELSON

Pipe Line Department  
Employed 11/1/17—Retired 1/1/53

### GEORGE SALISBURY

Field Department  
Employed 11/13/22—Retired 1/1/53

### JOHN A. VAUGHAN

Field Department  
Employed 5/30/34—Retired 1/1/53

### CHAUNCEY H. SHOUP

Field Department  
Employed 1/11/27—Retired 1/1/53

### MANUFACTURING

Higuera, Frank M., Oleum.....	45
Jacobsen, Shirley, Oleum.....	30
Phillips, Joseph M., Oleum.....	30
Freligh, Everett W., Wilmington.....	25
Manning, Everett E., Oleum.....	25
Parr, Louis J., Oleum.....	20
Johnson, James D., Oleum.....	15
Bechtold, Robert G., Wilmington.....	10
Hatherell, Alex, Cut Bank.....	10
Jelf, Kirk B., Wilmington.....	10
Phillips, Grace T., Oleum.....	10
Thompson, Joseph J., Wilmington.....	10
Wooten, Aubrey J., Wilmington.....	10

### EXPLORATION & PRODUCTION

Root, Clark W., Richfield.....	40
Willis, William S., Whittier.....	30
Yarnell, Arthur B., Richfield.....	30
Quick, John R., Orcutt.....	25
Barrios, Harry T., Louisiana.....	10
Davis, Braswell E., Orcutt.....	10
Manes, John W., Orcutt.....	10
Spates, Thomas O., Orcutt.....	10

### MARKETING

Fisher, Harold H., San Francisco.....	35
Flower, Forrest F., Los Angeles.....	35
Endicott, Claude W., Eugene.....	30
Bailey, Freda S., Seattle.....	25
Carlson, John W., Eugene.....	25
Clegg, Alindon R., Oakland.....	25

Keane, Anna L., San Francisco.....	25
Cairney, Ralph L., Portland.....	20
Ekberg, Martin G., Burbank.....	15
Parker, Howard G., San Francisco.....	15
Rude, Roy V., Bakersfield.....	15
Slagill, George E., Rosecrans.....	15
Howard, Harvey D., San Diego.....	10
Lorette, Rene Joseph, Oakland.....	10
Mathewson, Douglas D., Ventura.....	10

### COMPTROLLERS

Flynn, Beulah M., Home Office.....	30
Rogers, Elmer C., Home Office.....	30
White, Frank L., Great Falls.....	20
Searing, Eva Mae, Home Office.....	15
Carlson, Joanna A., Home Office.....	10

### PIPELINE

Sanders, Guy W., San Luis Obispo.....	30
Lusardi, Albino S., San Luis Obispo.....	25

### PURCHASING

McAdam, Russell G., San Francisco.....	25
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### RESEARCH & PROCESS

Hendricks, Grant W., Brea.....	10
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### MARINE

Wentworth, Edward D., Wilmington.....	10
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## IN MEMORIAM

With deep regret and with earnest sympathy toward their families and intimate associates, we report the death of the following employees:

On October 25, 1952

**CLAUDE E. WILSON**  
Southern Division Field Dept.  
Retired July 1, 1939

On October 29, 1952

**ROBERT H. TAYLOR**  
Home Office, Los Angeles  
Retired January 31, 1946

On October 31, 1951

**GUY TATE**  
Southern Production

On November 1, 1952

**FREDRICK S. WARD**  
Northwest Territory  
Retired June 1, 1948

On November 7, 1952

**DAVID LYNN DONALDSON**  
Field Production, Montana

On November 7, 1952

**JOHN R. KEWISH**  
Southern Production  
Retired January 31, 1947

On November 8, 1952

**WILLIAM B. ELLIS**  
Southern Production  
Retired February 28, 1947

On November 13, 1952

**FREDRICK A. CLEGG**  
Southwest Territory  
Retired January 31, 1947

On November 16, 1952

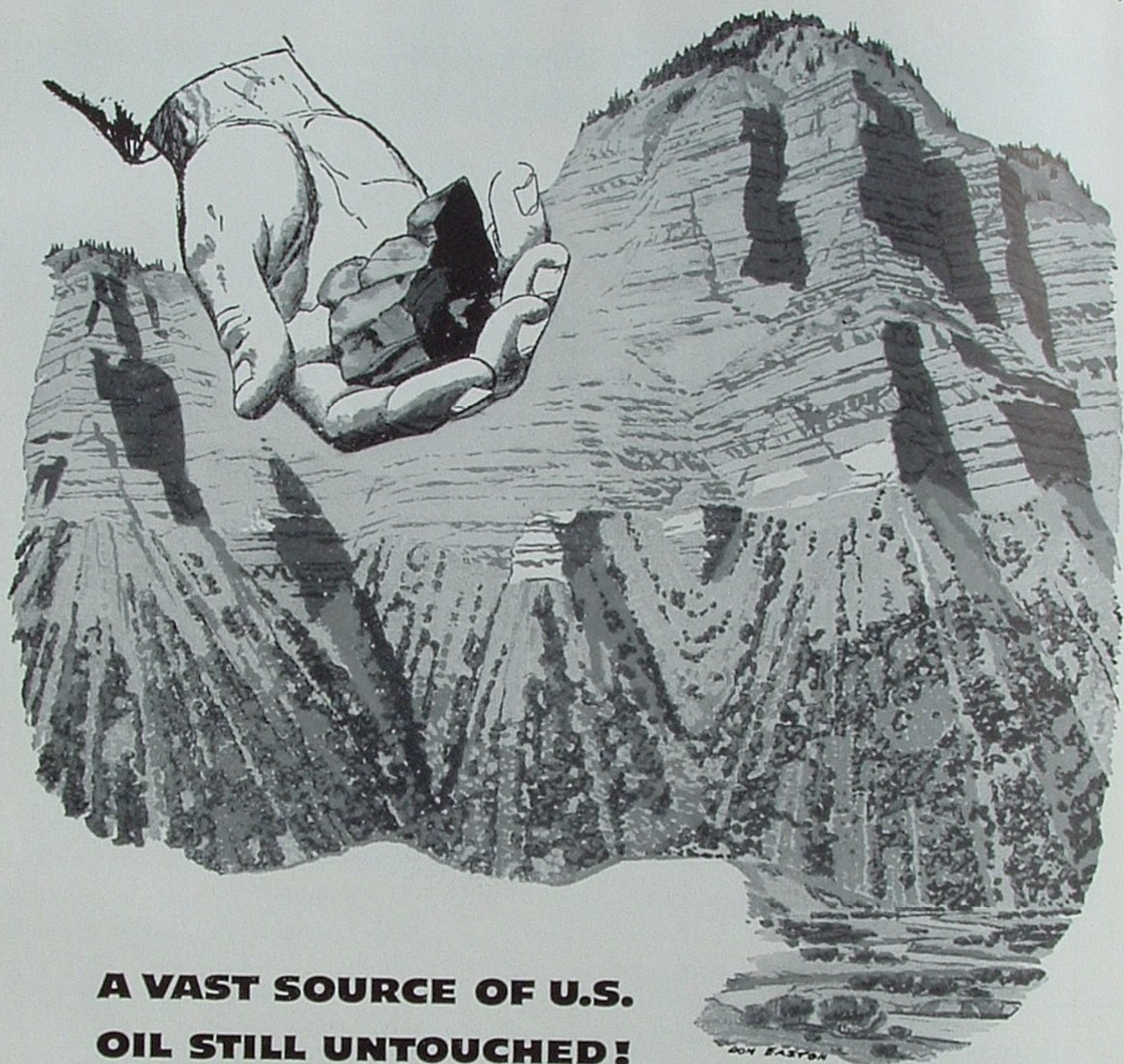
**HARRY C. CHERRY**  
Oleum Refinery  
Retired August 17, 1937

On November 16, 1952

**HENRY SEIBERT**  
Oleum Refinery  
Retired January 31, 1952

On December 2, 1952

**EDDIE W. HATHCOCK**  
Southern Pipe Line Division  
Retired December 31, 1945



## A VAST SOURCE OF U.S. OIL STILL UNTOUCHED!

**1.** Many Americans have probably never heard about oil shale—one of our country's greatest natural resources. Shale is a rock formation that contains kerogen—a solid that breaks down into oil and coke when heated. There are a number of shale formations in the U.S., the richest of which is in the Green River Basin of Colorado and Wyoming. This single 1000-square-mile deposit contains *three times as much* oil as the total proven crude oil reserves of the U.S.!



**2.** However, the big problem has been how to extract the oil from this shale on an *economical* basis. Union Oil research men have been experimenting with shale oil extraction since 1943. One of their accomplishments was the development of a retort that can extract shale oil far more economically than any previous method.

**3.** This retort—along with improved mining and refining techniques—has reduced the cost of producing oil from shale more than most people realize. And each year the cost of finding and producing crude oil continues to rise. At some time, then, it is probable that oil can be obtained from shale at a cost competitive with crude oil.

**4.** When this will come about is anybody's guess. But one thing is certain: the American people can be sure that this natural

resource of theirs will be developed at the earliest possible date with the greatest efficiency *only if private enterprise* is left free to do the job. For our *competitive private enterprise* system has demonstrated time and time again that it can develop better products, for more people, at lower prices than any method yet devised by man.

### UNION OIL COMPANY

OF CALIFORNIA

INCORPORATED IN CALIFORNIA, OCTOBER 17, 1890

*This series, sponsored by the people of Union Oil Company, is dedicated to a discussion of how and why American business functions. We hope you'll feel free to send in any suggestions or criticisms you have to offer. Write: The President, Union Oil Company, Union Oil Building, Los Angeles 17, California.*

MANUFACTURERS OF ROYAL TRITON, THE AMAZING PURPLE MOTOR OIL