

Union's First Exploratory Well in Utah . . . Overlooking Uinta Basin's Strawberry Reservoir.



The Van Hummell Building, Denver, Headquarters of Our Rocky Mountain Division

Rocky Mountain Division SEPTEMBER 1952



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In This Issue

ROCKY MOUNTAIN DIVISION	2
UTAH'S UINTA BASIN	6
COMPANY RELEASES	
EXPLORATION DATA	8
DISASTROUS WHARF FIRE AT OLEUM	9
QUEENS FOR A DAY	
WITH THE MORSHEADS	12
INDUSTRIAL SUMMARY	14
SOUTHWESTERNERS DESIGN NEW OIL TRUCK	16
UNION OILERS	18
SPORTS	20
IN MY OPINION	22
SERVICE BIRTHDAY AWARDS	
RETIREMENTS	
IN MEMORIAM	23
HAVING TROUBLE WITH	
YOUR FAMILY BUDGET?	24

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.

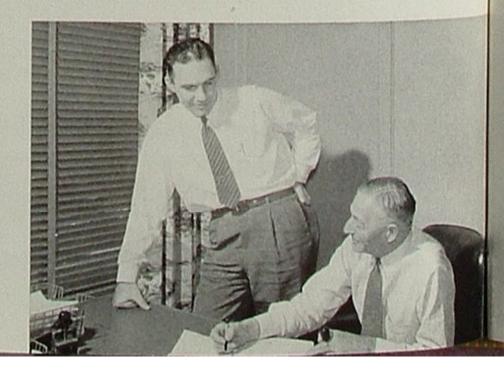
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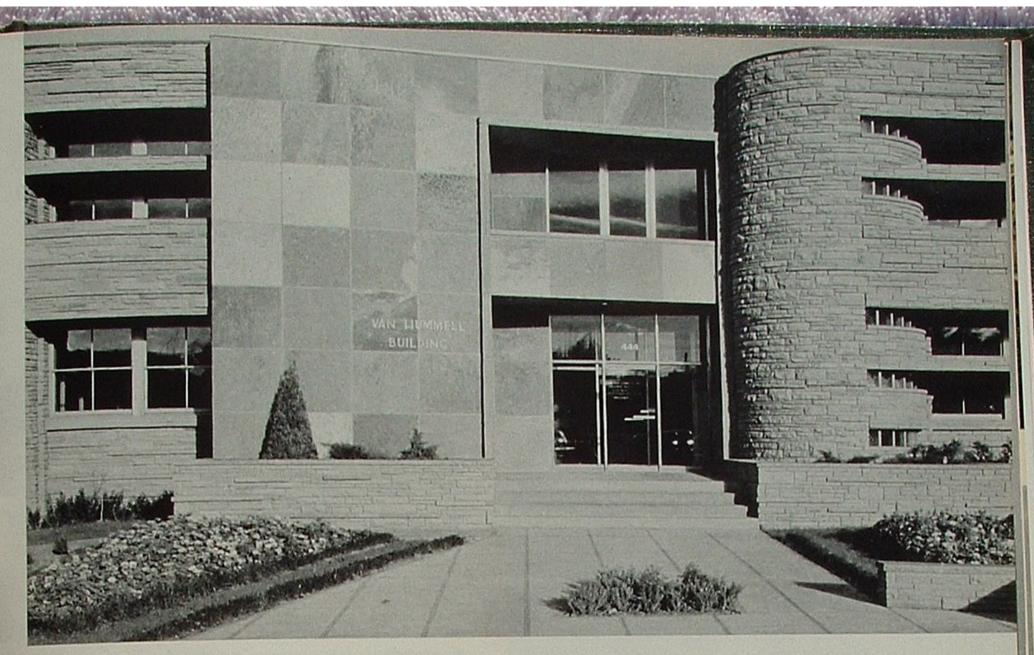


Manager of Operations, Rocky Mountain Division, is Chester Cassel, left, seen conferring with Assistant Chief Geologist Charles O'Boyle, District Geologist Wade Moore and Chief Geologist James McCourt in Denver office.



Our Rocky Mountain Land Department includes, above from left, Secretary Lois Westwood, Manager Bill Morgan, Landman Charles Cavness, Supervisor of Lease Processing Hugh Post and Landman Morris Miles. Below, Frank Ball, standing, was being indoctrinated as Manager of Field Operations by "Perc" Tallant, who has now reached retirement.





Rocky Mountain Division

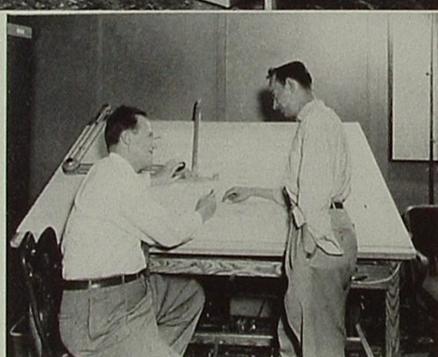
THERE have been varying degrees of oil excitement in the Rocky Mountains since prior even to the heralded first well drilled in Pennsylvania by Colonel Drake. Prairie schooners of the Forty-Niners are known to have used oil seeps in Wyoming to replenish their supplies of axle grease. And, in fact, as early as 1883 Wyoming joined the few states then producing commercial quantities of petroleum, and has remained prominent in oil ever since. Its Salt Creek Field, discovered in 1908, has far exceeded 300 million barrels of production and ranks among America's richest finds.

But at no time during the past century has the Rocky Mountain area witnessed evidence of greater expectation than that of today. Geologists and seismograph crews are probing a wide belt of terrain ranging from Texas and Oklahoma northwestward into Alberta, Canada. Hundreds of landmen are competing for subsurface mineral rights. Ranchers and other property owners in Colorado, Wyoming, Utah, Montana, Nebraska and the Dakotas are dreaming as never before in terms of underground wealth. It is the curtain raiser of an exploratory program that may become one of the largest, most costly, most competitive—and, hopefully, the most productive—in petroleum history.

Denver's Van Hummell Building, one of the West's newest and finest, is the home of Union Oil's Rocky Mountain Division. Built of red Colorado flagstone, the building is beautiful throughout, even to its rear stairway, below, down which Gloria Sarver and Norma Griessmer go off tour.









Union Oil Company is no stranger to the Rocky Mountains. Since the early 1900's, our explorers have taken an active interest in the region's potentialities. In 1917 we acquired large mineral rights in Wyoming and, within three years, were launched upon a successful drilling program. Our important oil shale holdings in Colorado were acquired beginning in 1920 and 1921. In 1923, Union drillers brought in a spectacular 75-million-cubic-feet gas well near Fort Collins, Colorado.

Although most of Union's producing wells in Wyoming and Colorado were subsequently sold to other companies in exchange for assets that were more convenient to our operations, we have maintained our residence.

Exciting foremost public interest today is the huge Williston Basin of the Dakotas, Montana and Canada.

FORT MORGAN personnel in two photos below are Geologist John Stephenson, District Landman George Grimes, District Geologist Max Mott, Clerk Pat Sharp and Secretaries Jane Rigdon and Jo Ann Carpenter. Their branch office is located 80 miles northeast of Denver headquarters.





CASPER, the oil capital of Wyoming, is the location of another Union Oil office, staffed by (from left, above) Landman George Allred, District Landman Orval Heck, Hugh Post of Denver office; District Geologist Wade Moore, Geologist J. P. Gillum, Geologist John Moffitt; and (at right) Stenographers Patricia Hudson and Shirley Volker.

Here, where Union Oil has a half-interest in some of the largest oil prospects ever leased, the drilling bit is expected soon to tap important production. However, in the mountains themselves are tracts of great promise, notably Powder River Basin of Wyoming, as well as Colorado and Utah areas not yet fully explored.

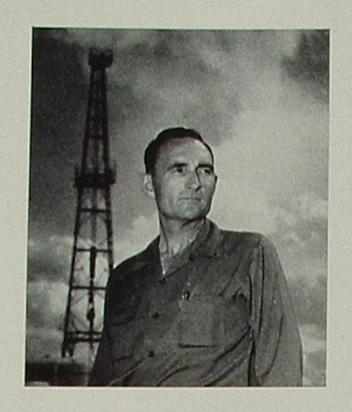
The Continental Divide, whose melting snows find their way to both the Pacific and Atlantic oceans, may yet also divide large supplies of petroleum moving down to the peoples of both coasts. If so, to the Union Oilers introduced herewith in pictures will go much of the credit. All are members of our Rocky Mountain Division, an Exploration and Production team whose job it is, in a petroleum sense, to rope, tie and saddle one of the world's largest mountain ranges.

BILLINGS in Montana has the northernmost office of our Rocky Mountain Division. Here (in two photos at right) Stenographer Doris Faxon, District Geologist Arthur Lewis, Ir., Draftsman Richard McGhee; Landman C. E. Reeder, District Landman James Smith, Stenographers Ione Lang and Marian Thomas work to enlarge Company oil reserves.

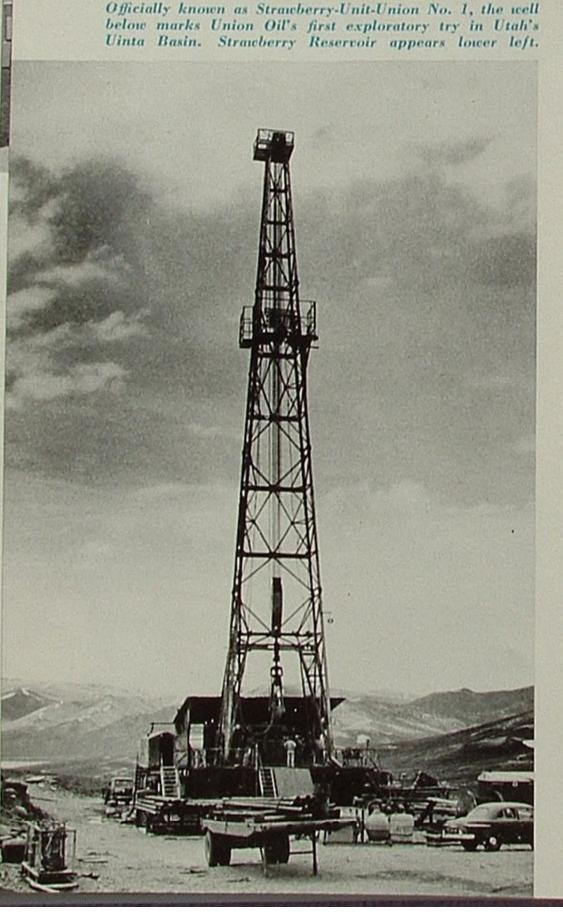








During rig and road building operations in early spring, Al Hilton (left), petroleum engineer, paused to record the above photographic evidence of severe winter weather.





In charge of our Uinta Basin activities are, above from left, Petroleum Engineer Carl Johnson, District Landman Don Jerome and, below, District Geologist George Shapard.



Utah's Uinta Basin

By Charles F. Manlove

UNION Oil Company is now drilling an exploratory well about 80 miles southeast of Salt Lake City, Utah. The drilling site is some 7,000 feet above sea level, but is looked down upon by snow-capped peaks of the Wasatch and Uinta mountains which here form the rim of Utah's Uinta Basin. This wildcat venture into a thick section of Tertiary rocks is something comparatively new in oil exploration, although the area has been of great interest to petroleum men for several generations.

Beginning near our Strawberry Reservoir drilling site, the Uinta Basin extends eastward more than 100 miles to beyond Vernal, Utah. To oil men the region is remarkable because of the hydrocarbon substances that occur there in great abundance. Among these substances, gilsonite, elaterite, ozokerite and nigrite are solid hydrocarbons which occur in veins. Gilsonite, the most abundant and important, is mined near Watson, Utah, for many uses including the manufacture of paints, varnishes and plastics. Uinta's gilsonite reserve, found in veins measuring up to 18 feet in width and extending as far as 23 miles, is estimated to be 30 million tons. It and some of the other hydrocarbon solids are not known to exist in commercial quantities elsewhere in the world.

Deposits of bituminous sandstone are present in many places in the Tertiary formations, and occasionally in the older rocks, of Uinta Basin. The larger deposits are remains of gigantic oil fields that have been exposed by erosion of the overlying and enclosing rocks. Upon exposure most of the gases and lighter petroleum fractions escaped to the atmosphere, leaving a relatively heavy oil residue in the sandstone. One of the largest of such deposits is found in Asphalt Ridge near Vernal. Another lies on the southern edge of the Basin near Sunnyside, Utah. Recent studies by the U. S. Bureau of Mines indicate that more than two billion barrels of residual oil are contained in these two deposits.

Dwarfing the bituminous sandstone deposits into insignificance, moreover, are petroleum reserves contained in the oil shales of Uinta Basin. Oil shale beds of the Green River formation outcrop a distance of 120 miles along the Basin's entire southern side. They are also present but concealed through an adjacent several thousand square miles of area. In comparison with the 40 billion barrels of oil contained in Union Oil's 100 square miles of oil shale reserves west of Rifle, Colorado, this Utah potential seems almost beyond comprehension.

Bituminous sandstone was first quarried from the Sunnyside deposit in 1892 and used in paving streets in Salt Lake City. Concern over a possible scarcity of oil in the early 1920's led to intense interest in the possibility of producing oil profitably from the oil shales. A great deal of oil shale land was taken up in placer mining claims, and several experimental plants for processing oil shale were set up. However, a subsequent decrease in the price of oil together with many large crude oil discoveries caused interest in oil shales to die away by the end of the decade.

The fact that very few wells were drilled for liquid oil in the Uinta Basin until quite recently, in spite of favorable surface indications, was perhaps due to remoteness of the area from larger markets, and its lack of anticlinal structures. Wells which were drilled on the few structural features within the Tertiary basin were unsuccessful. In addition, most commercial oil accumulations occur in marine sediments, and many people doubted the probability of commercial oil accumulations existing in the fresh water lake beds and river deposits of the Teritary formations. So, the oil industry spent its exploration money elsewhere. Not until the rising tempo of oil demand following World War II did the industry begin to renew acquaintance with the Uinta Basin.

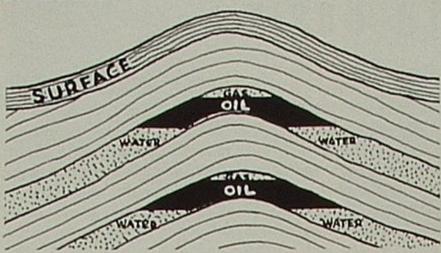
The initial liquid oil discovery here came in July, 1949, when Stanolind and Carter brought in the Roosevelt Field about 20 miles southwest of Vernal. The well was completed flowing 1,633 barrels per day of 32-gravity, high pour point, paraffin base oil from 9,351 to 9,392 feet in Basal Green River formation. Production is from fractures or fissures in dolomitic shales and hard, limey sandstone. At present there are five producing wells in the field, indicating a producing area of at least 10 square miles. Limits of the field have not been established.

California Company discovered the Red Wash Field in February, 1951, about 31 miles southeast of the Roosevelt Field. Oil similar to that of the latter field is produced from permeable sandstones of the Green River formation at depths of only 5,200 to 5,600 feet. At present there are 16 producing wells in the Red Wash Field, whose two-by-six miles dimensions have not yet established its limits.

Carter and Continental discovered the Duchesne (pronounced Du-shane) Field in July, 1951, about 30 miles southwest of the Roosevelt Field. The discovery well flowed 538 barrels per day of 42.9-gravity oil from depths of 7,486 to 7,596 in Wasatch sandstone. A second well recently completed in this field began flowing at the daily rate of 1,730 barrels.

Discovery rate in the Uinta Basin during the past three years has been encouraging. Despite the lack of closed

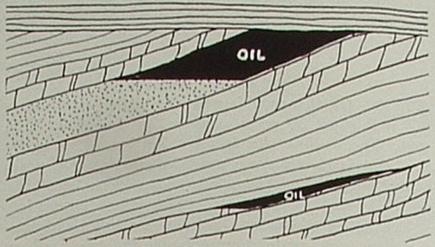
Anticline



anticlinal structures, oil companies are encouraged to look for great potential deposits of oil stratigraphically trapped in the Tertiary and Green River formations.

Stratigraphic traps are difficult to locate. Exploration for them usually involves a relatively larger number of wells. Drilling and exploration costs are high. The high

Stratigraphic Trap



paraffin content of the oil and the fact that it congeals at temperatures of 90 to 100 degrees F. result in increasing the cost of production and transportation. However, present activity indicates that possible rewards are worth the risks involved. Uinta Basin may yet occupy an important place in this nation's oil economy.

Company Releases Exploration Data

THE suspension of Union Oil Company exploration activities on Olympic Peninsula in the state of Washington was made public July 1, 1952. It brought to a temporary end at least the greatest effort yet made to find a local source of oil for the Pacific Northwest's expanding petroleum needs.

Like nearly every unsuccessful try in unproved territory, this one was expensive. The Company drilled 14 wells, or 63,000 feet of hole in six different counties, before deciding to suspend. Written off to experience was the tidy sum of \$3,500,000.

Union Oiler John Sloat is seen readying an exhibit of core samples from Company exploratory wells in Washington.

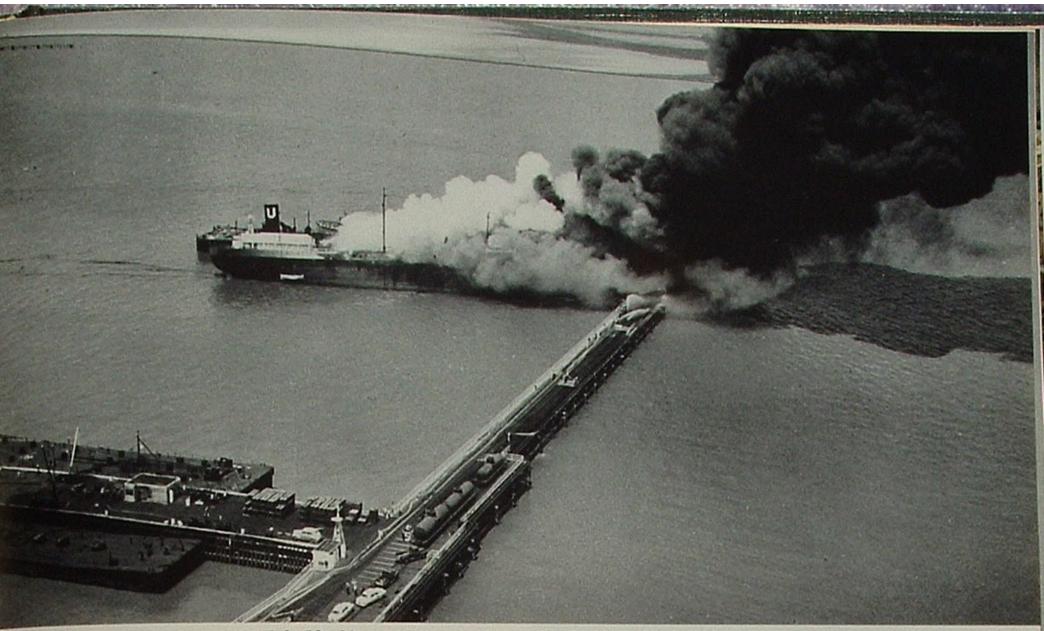


As a parting gesture of good will, particularly toward property owners and the many other people who would benefit from oil discovery in the Northwest, the Company made known the full text of its Olympic drilling information. Our core samples were assembled and placed on display in Olympia during July, providing representatives of other oil companies invaluable data to assist them in any future exploration.

John Sloat, Union's manager of exploration for the Pacific Coast, stated in addition that "We still believe commercial gas or oil exists in Washington. One of our Grays Harbor wells produced 70 barrels of oil and two million cubic feet of gas per day. The oil was very high in quality. However, due to complex underground conditions, the well could not produce on a permanent basis. We are still holding 40,000 acres of prospective oil lands here in the hope that some other company strikes where we have failed."

On July 1, the valuable data was made public in Olympia. Geologists from many oil companies inspected the corings.





A few minutes past noon on July 12, this was the unpleasant marine view from Oleum Refinery. Three lives were

already lost. A valuable tankship and wharf were being consumed. Human valiantness was averting a worse tragedy.

LATEST REPORT ON

Disastrous Wharf Fire at Oleum

A T seven minutes before noon on Saturday, July 12, fire broke out near a light-oil loading manifold on the outer wharf at Oleum Refinery. Just a wisp of smoke at first, it leaped into flame, raced with an eight-mile-per-hour breeze under the wharf, and boarded Union Oil's SS VICTOR H. KELLY tied alongside. Within 12 minutes, forward tanks of the KELLY exploded, sending a curtain of flame across the wharf and damaging another Company tankship, the SS LOMPOC. Both ships had been pumping off crude oil. The KELLY was nearly empty and within an hour of sailing. The LOMPOC was only half unloaded.

Despite heat and explosions, many of the ships' officers and crew members stuck to their posts until ordered off. They sounded alarms—shut down ship cargo pumps—cut or slacked off accessible mooring lines—readied fire-fighting equipment. In desperate efforts to snap remaining ties holding the ships to the wharf, they set both burning vessels in astern motion. By these maneuvers the LOMPOC, with her more powerful engines, broke away into Carquinez Straits and, though afire, was saved. The KELLY, too badly handicapped after the explosions, had to stay lashed to her funeral pyre.

Meanwhile, equally courageous fighters from Oleum

Refinery held a battle line just forward of the KELLY's bow, thereby saving most of the wharf. They were aided promptly by so many off-duty employees and municipal firemen from nearby communities that, in Oleum's words, "to single out some would be manifestly unfair to hundreds who worked hard and willingly."

The KELLY, worth more than \$2,500,000, is considered a complete loss by insurance carriers. Repairs to the LOMPOC, now in service again, exceeded \$160,000. Wharf damage is estimated in excess of \$750,000. These losses cannot be lightly transferred to the underwriters, since in the long run insurance is simply a means of spreading such costs over the years.

Worst of all, three lives were lost. Captain Eugene J. Fulton of the KELLY died of a heart attack, it is assumed, after his ship started to burn. Radio Operator William A. Liggins and Seaman Rollie Yarger, also of the KELLY, were reportedly drowned after leaving their ship.

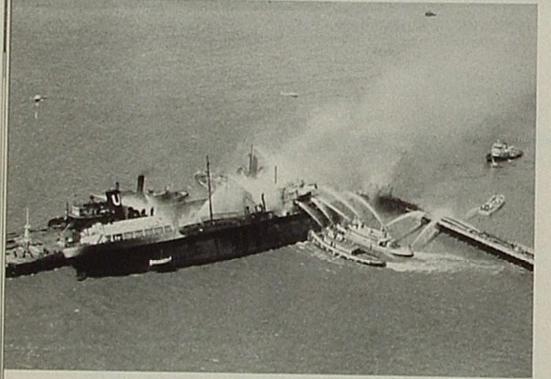
The greatest good that can be salvaged from such a tragedy is the increased vigilance that it should inspire. Every worker in the petroleum industry could well afford to re-examine his workshop and home—for the presence of fire hazards—now.



After several unsuccessful attempts to snap her forward lines, the KELLY lost steam pressure; her free stern then began to drift, endangering the long wharf background.



A doughty tug came to the rescue, pushing the tankship's stern back to prevent spread of the fire. Men seen on the wharf volunteered to make the doomed ship secure.



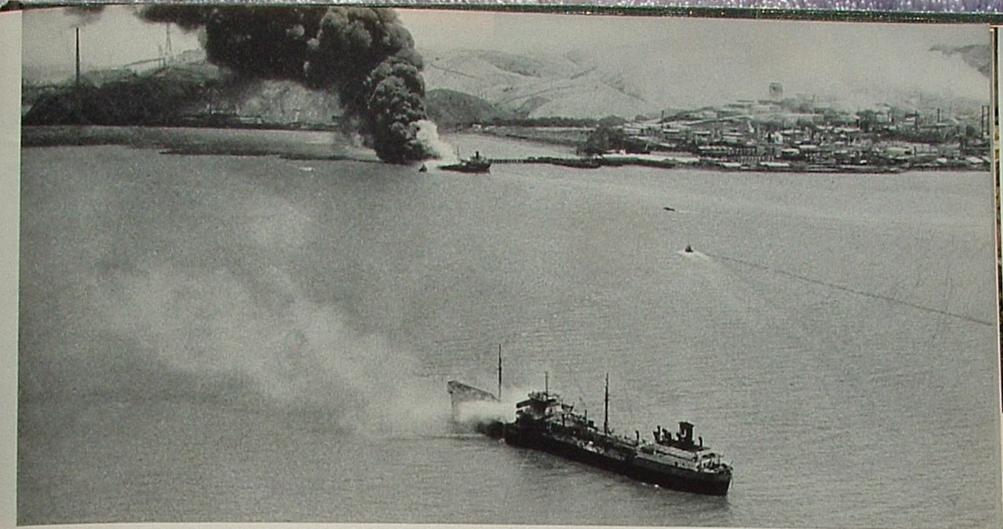
Bad as it was, the fire could have caused much greater damage, except for the prompt assistance of fireboats, above, and fire-fighters, below, seen guarding the dock.



Though still afloat and undamaged throughout her aft quarters, the KELLY is regarded as a total insurance loss.

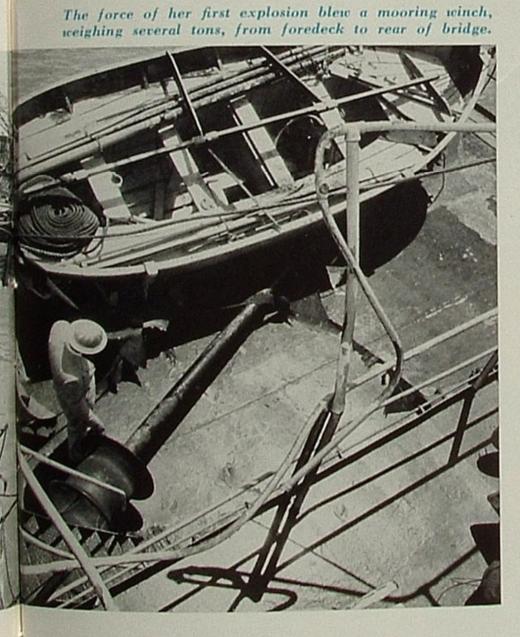


ON TOUR



Granted utmost freedom and courtesy, the public press did an outstanding job of reporting this disaster fully and accurately. The above aerial and several other photos published here were courteously sent by press photographers.

The LOMPOC broke away from the burning wharf by moving under power to snap her lines. Her officers and crew, assisted by a fireboat, extinguished the midship blaze.



Damage to the LOMPOC was more extensive than estimated at first. She was repaired at a cost exceeding \$160,000, but is at sea again continuing her transportation role.





ON TOUR



Director Stanley W. Morshead of the Union Oil Board and Mrs. Morshead long have been hosts to Union Oilers.

HIGH on Central Territory's list of favorite people are Mr. and Mrs. Stanley W. Morshead, whose 360-acre estate near Redwood City, California, opens wide its attractions at least one day each year to Union Oilers of the San Francisco Bay area. Years ago, everybody within hailing distance on Company payrolls, plus not a few uninvited guests, joined the country-bound caravan. But finally our numbers became so great that the host, with the gracious consent of Mrs. Morshead, decided to limit invitations to women only.

Saturday, July 26, was the date of this year's joyous outing. As proof of how the guests responded, we submit picture evidence gathered by a certain male exception to the rule, your newsboy.

Mr. Morshead, as most Union Oilers are aware, is one of the senior members of our Board of Directors. For many years he has been a key figure in the development of California oil properties. His favorite place of residence is the large wooded estate. And one of his favorite pastimes is to share such enjoyments with others.

Making an impromptu tour of the beautiful new Morshead home were Dorothy Ennis, the host, Emma Svirbely, the hostess, Liela Thorp and Anna Keane, Bay Area oilers.



Queens For a



Attractions of the big estate include a lake



Near the water, some girls were timid

nor dine lavishly on picnic fare

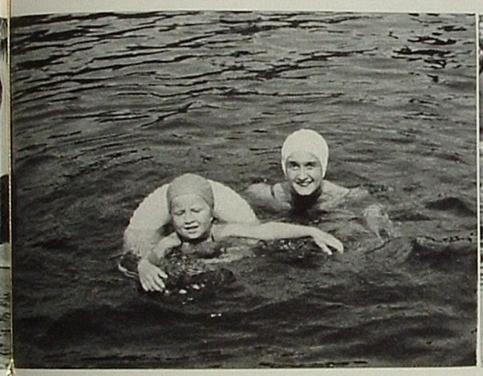
a Day With The Morsheads



. . and Stuart Morshead's genuine steam locomotive .



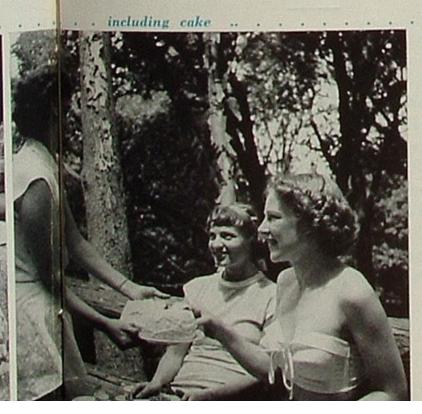
. . . . which assisted the photographer with a derailment.



others took to it like ducks . . .

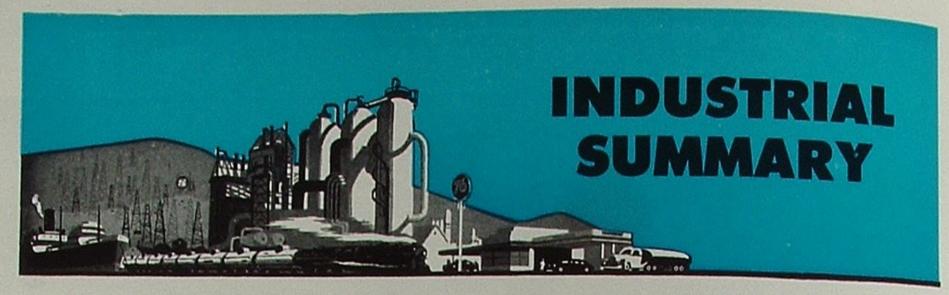


. but none failed to enhance their attractive situation . .





. . nor talk about winning their own estate



Elected Vice President



On July 28, 1952, W. C. Stevenson was elected by the Board of Directors of Union Oil Company a vice president—in charge of Industrial Relations.

Bill, as he is familiarly known throughout the Company, joined Union Oil in 1925 as a utilities inspector at Oleum Refinery. He had graduated from Stanford University in 1922 as a mechanical engineer. Succeeding in a number of supervisory assignments, he became manager of Los Angeles Refinery in March, 1942, then manager of Oleum Refinery in December of the same year. His appointment to head the Industrial Relations Department under Executive Vice President W. L. Stewart, Jr., was made in 1946.

When being congratulated on his appointment as vice president, Bill replied characteristically: "It highlights the growing importance of the Industrial Relations Department rather than mine." • RESEARCH

For some months prior to startup of the new Fluid Catalytic Cracking unit at Los Angeles Refinery, studies were conducted in cooperation with the Manufacturing Department of the characteristics of this type of gasoline stock. Treating procedures were developed to assure the continuity of the high quality of 76 and 7600 Gasolines when blending stocks from the new unit became available. On the basis of recommendations made as a result of this study, the new FCC unit was brought on stream with no unforeseen problems arising in handling of the new product.

The first half of a one-year main line freight engine test of Triton RR Diesel Engine Oil has been completed. Results were exceptionally good at this half-way point. Other acceptance tests of the product are now in progress in several major makes of railroad engines.

from C. E. Swift

• MANUFACTURING

The Oleum wharf recently damaged by fire has been repaired sufficiently to permit handling of cargoes. A survey is being made to determine the necessity for improved facilities required here to meet the increasing demand for water transportation of crude oil and petroleum products.

The new cracked gasoline treating unit is now in operation at Los Angeles Refinery. The unit processes about 15,000 barrels per day of cracked gasolines produced by catalytic and thermal cracking. The process basically consists of treating cracked gasoline with sulfuric acid, neutralization with caustic soda, and subsequent vacuum distillation. Object of this treating is to remove sulfur compounds and gum-forming bodies from the untreated stock. Treated cracked gasoline is a valuable component of motor gasoline because of its high octane value.

The recent earthquake in Southern California caused only minor damage at Maltha Refinery in Bakersfield, consisting of damage to the roof of a 10,000-barrel crude oil tank and moderate damage to the foundations of three shell stills. No damage was found at the Los Angeles Refinery. Refinery operations were not interrupted as a result of the earthquake.

from K. E. Kingman

One of the major problems of an oil producer is to dispose of large quantities of water produced in conjunction with crude oil. The problem as it affects Union Oil is concentrated mainly in California. Some idea of its magnitude may be gained from the fact that every day the petroleum industry in California has to get rid of close to 70 million gallons of water which is brought to the surface with crude oil. Of this quantity our Company produces and disposes of some 8½ million gallons each day. Our investment in facilities to get rid of the water amounts to \$1,900,000, and we spend approximately \$300,000 annually in their operation.

Methods used to dispose of this nearly useless waste product are numerous. The simplest and least expensive method is to let the water evaporate from open sumps. A much more costly way is to transport the water by large pipe lines from producing fields to the ocean. We have installed two such parallel lines in the Santa Maria area at a cost of approximately \$1,000,000. These handle all water produced by other companies as well as our own in the Gato Ridge, Cat Canyon and Santa Maria Valley fields.

Another disposal method rather widely used is to inject the water underground into strata underlying the fresh water zones in non-commercial oil wells. In certain areas, such as Orange County and Santa Fe Springs, operators have banded together to create and operate disposal companies which pipe the waste to tidewater.

Of increasing importance to California is still another method. Some of the waste water is injected into oil sands for the purpose of driving immobile oil to producing wells, thus disposing of the water and increasing the oil production in certain fields.

from Sam Grinsfelder

• MARKETING

As a result of improved supply, sales restrictions and allocations have been eased on 7600 and 76 Gasolines and lifted entirely on S-76 Solvent and Union Thinner No. 5.

Royal Triton continues to establish new sales records, reflecting ever-increasing demand for this outstanding motor oil. Total Company sales for the first half of 1952 were 95 per cent higher than during the same half of 1951, increases being noted in all sales areas and classes of trade. To maintain impetus, and to further enhance sales of our other motor oils, a combination sales training and sales stimulation program is now under way throughout the Company's domestic marketing area. Training materials include charts and two sound-slide films—"Make Mine Motor Oil" for dealers, and "Meet John Dough" for dealers' employees. A new lubricating oil section for the Minute Man Manual is being distributed at dealer meetings. Service stations are also being furnished with ratio charts on which motor oil sales progress can be plotted.

Our eastern marketing program continues at an accelerated pace. More than 50 distributors are now handling Company products and eastern sales exceed 200,000 gallons monthly.

Eric Davies, director of Duncan, Fox & Co., Ltd., with headquarters in Santiago, Chile, recently spent two weeks with us to view our facilities in California. In addition to acting as our European agents, Duncan, Fox & Co. are our agents in Chile, Peru and Bolivia. A long and pleasant friendship has been enjoyed with these agents, dating back to 1906, at which time Mr. Davies' father negotiated the first agreement with Union Oil Company at Lima, Peru.

from Roy Linden

• INDUSTRIAL RELATIONS

The Company's on-duty disabling injury rate for the first half of 1952 was 8.6 per million hours

worked, an improvement of six per cent over our 1951 accident frequency rate. In down-to-earth statistics this means that four Union Oilers this year came through unscathed, whereas, under the 1951 accident rate, they would have met with disabling injuries on the job.

The Research and Process Department completed a million man-hours of operation without a lost-time personal injury as of June 13, 1952. There are 337 employees in the department. To date, this fine record continues unblemished at 1,160,000 man-hours.

from W. C. Stevenson

* TRANSPORTATION & DISTRIBUTION

During July the SS SAN-TA MARIA delivered the initial cargo of Triton

base stocks into terminal storage at Carteret, New Jersey, and Good Hope, Louisiana. Compounding, canning and barreling were commenced immediately. Hereafter, all shipments to our eastern distributors will move from these terminals.

The Company's McKittrick Pump Station is now able (Continued on Page 23)



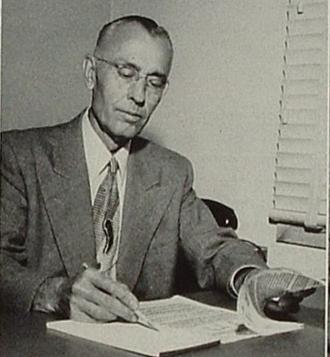




Designers of the new truck and delivery system were, from left above, Superintendent Don Reed and his assistants Art Roseman and Al Van Nest of the Los Angeles Terminal;

and Assistant Territory Manager Harry Schafer of Southwest Territory, seen dictating his recommendations to Secretary Ann Peterson after researching the proposal.

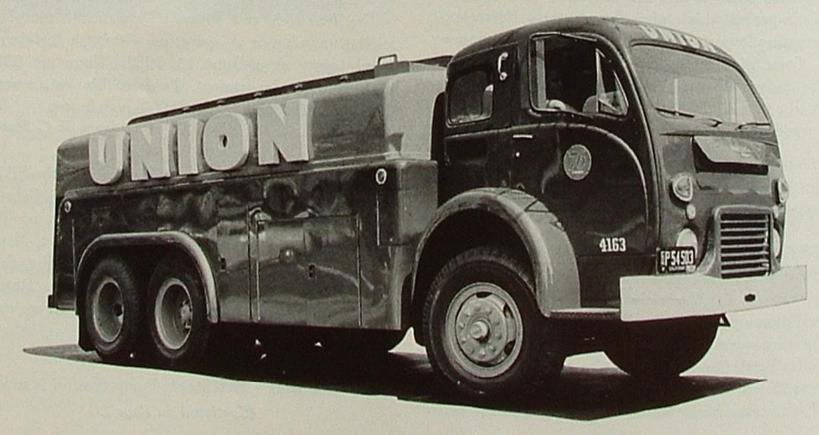






Receiving the letter of recommendation at Home Office, Manager J. W. Sinclair, left, and his assistant R. F. Labory of the Automotive Department authorize construction of

the truck through our Santa Fe Springs Garage. Finally to Automotive Superintendent Bob Thompson and Engineer Ed Schmidt fall the job of converting ideas to vehicles.



Southwesterners Design New Oil Truck

TEN years ago, practically all bulk lubricating oil was delivered to service stations in five-gallon buckets. It was an awkward, slow and laborious job. Each bucket had to be filled exactly to its five-gallon marker from barrels or bulk storage. Oil was handled manually several times enroute through the warehouse, aboard a stake-truck or tank-truck and into service station containers. Extra house-cleaning, bucket-washing and bucket-painting added to the costliness of this delivery method.

Faced with delivering a half-million gallons of oil by this method each year, our Los Angeles plant in 1945 initiated two lube-oil tank-trucks equipped with pumps and hoses. These proved highly superior to stake-trucks and remained in service long enough to exceed a threemillion-gallon delivery accomplishment.

But today, thanks to an idea suggested by Southwest Territory minds and developed by Union Oil's Automotive Department, something even better is on wheels.

Two new trucks have been built and are already at work satisfying the bulk oil needs of 500 service stations in the Los Angeles basin. Each truck can carry four commodities and has a total capacity of 2,165 gallons. For each commodity the truck has a power take-off, pump, meter and self-rewinding hose reel.

With 50 feet of delivery hose at his disposal, the operator carries a hose nozzle to the service station receptacle, pulls the trigger, and within one minute can deliver up to 45 gallons of lubricating oil.

When station containers are filled to capacity, the driver places a set of printed tickets in the truck meters to obtain an automatic recording in gallons and tenths of each commodity delivered. With similar ease, the station operator's name, address and other required accounting data are stamped on the tickets by means of an addressograph plate and a small stamping machine installed as part of the truck's equipment. Signatures and commodity names are the only writing required.

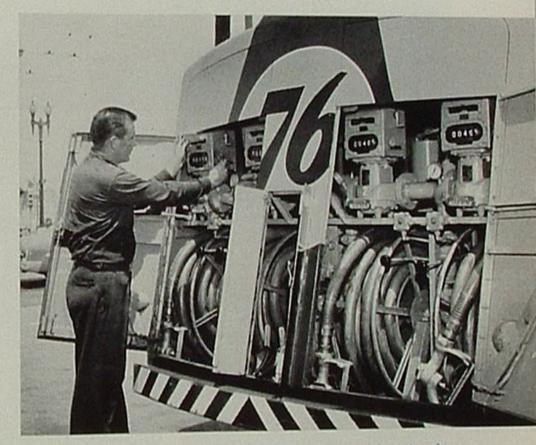
Pricing and price extensions of tickets are completed by the Accounting Department, who mail the itemized ticket to the dealer for payment.

Among the economies already apparent in this modern system of delivery are reduced truck mileage, shorter delivery time, larger average deliveries, a smaller investment in containers and warehousing space, and considerable labor saving over the former system.

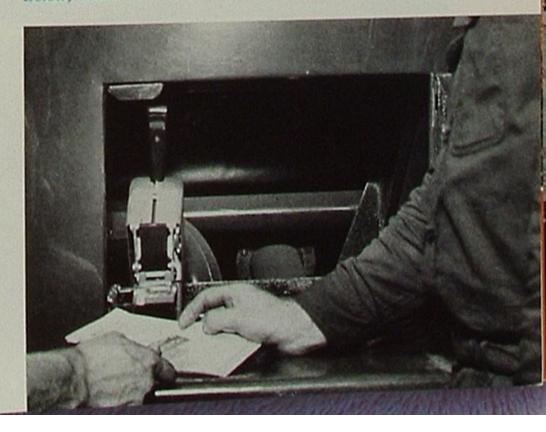
Other metropolitan areas served by Union Oil will undoubtedly adopt similar delivery systems when the new Los Angeles equipment fully satisfies its designers.

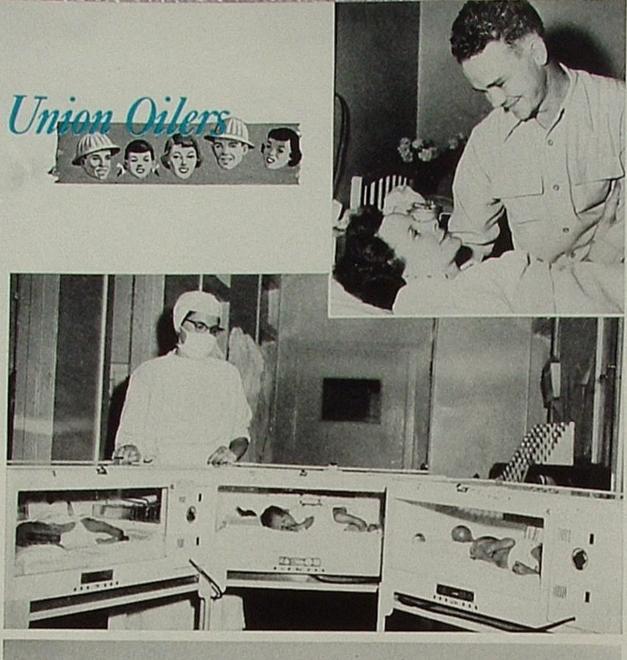


Still working under the job title of package truck handlers, Art Timmins and Bob Daniels demonstrate Union's newest method of delivering lube oil to service stations.



Following delivery, Art records the gallonage by simply inserting delivery tickets in automatic recording meters. Below, dealer identification is stamped from metal plate.





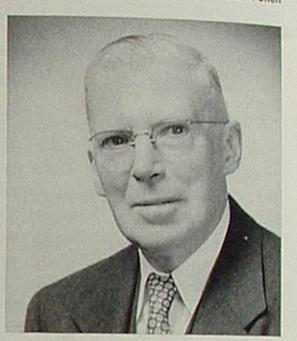




PAUL TURNER, a treater at Oleum Refinery, is from Missouri. So the stork countered all disbelief on July 16 by showing up at an Oakland hospital with triplets. His wife, Marie, inaugurated the deluge of infants with a 70-mile-per-hour ambulance ride from Rodeo. In one fell swoop the Turners came within two of the Herb Hemmens' six.

from John Pollen

price



CHARLES ATWOOD

clerk in the San Francisco office, retired August 1 after 32 years of unbroken figuring. Employed as an assistant stock clerk in 1920, he and accounting got along so well that, even when transferred to a Sacramento River job on our MS PIRU, he had to pilot a set of marketing ledgers.

95 SERVICE YEARS are the combined achievement of, from left, Genevieve Lory, James Bonner and Ida Ruppert, all of our Seattle office. Ida took a temporary job with Union Oil exactly 35 years ago, but by now is giving serious consideration to making this her one and only job since leaving school.

the 25-YEAR CLUB in Hono-lulu now boasts a new member, Makoto Murakami, salesman. In presenting his service pin, District Sales Manager Robert Rath, left, summoned as well-wishers Alan Holroyde, William Apaka, Albert Wong and C. Kenny Layton—employees who themselves have exceeded the 25-year continuous service mark.



VISITORS recently at Will-bridge Terminal in Oregon and aboard the tankship SS OLEUM were employees of the Portland District Office, some of whom had traveled to distant wonders of the world before taking a good look at their own picturesque waterfront. Superintendent John Maguire of the Terminal and Captain Robert Bonner of the OLEUM were considerate hosts even to the extent of serving coffee and cookies.

four IN SANTIAGO, CHILE, young students stopped for a supply of Triton Motor Oil before continuing on to Rio de Janeiro. In their Chevrolet station wagon they had traveled overland from New York, across the United States, through Mexico and Central America, and through Colombia, Ecuador, Peru and Chile. Their names are, from left, Yanar Carvalho, Jose Reznik, Osman Castro and Nicolau Machado. Their preference for Triton was well advertised in South American newsfrom Duncan, Fox & Co., Ltd. papers.

ROSS GUILLEY, salesman of Eugene, Oregon, learned, as a B-17 pilot to follow orders. So, when told to recover every possible barrel everywhere during the recent steel shortage, he did not overlook even a certain T5X barrel last seen across the creek on an Erland & Bickle road building job 70 miles from Eugene. We ought to have a few of his type in Washington—D.C., that is.

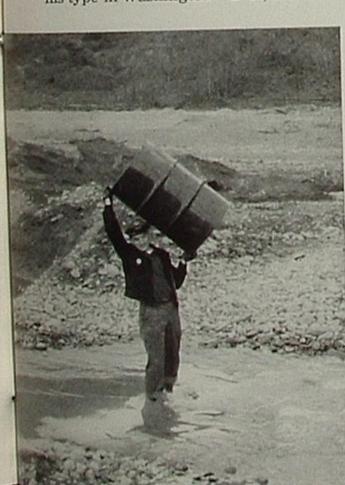


KNIGHTS OF THE ROAD

honored in Central Territory by Union Oil Company this year were, from left, Bud Lynch, Stan Smithem and Elmer Richardson, shown receiving their Safe Driver Awards from H. I. Bremner, terminal superintendent at Sacramento. These Union Oilers are drivers of petroleum transports and tank trucks.

It is something of an achievement

to drive the family sedan back and forth to the grocery store for one full year without receiving a souve-nir dent or two. But when you can roll up a thousand miles or more a week—through all types of city and suburban traffic—on all types of roads—in a big truck that hugs both sides of a traffic lane—and come through without scratching anything or anybody—that, sir, is first-class driving.







MISS DIXIE FOSTER, secretary in the Company's district land office in Salt Lake City, is a foremost booster of these good United States. A native of Utah, she spent some time in Washington, D.C., as secretary to a Utah congressman, and later was a court reporter for the War Department. In 1946, she accepted an overseas assignment as a War Crimes Trial reporter with the American

Occupation Forces.

During two years overseas, her assignment took her first to Ludwigsburg and Heidelberg in Germany; then to Salzburg, Austria, only a half-hour's drive from Hitler's Bertchesgaden; but principally to the infamous Dachau Concentration Camp near Munich, Germany.

At Dachau she took part, as a reporter, in concentration camp atrocities trials, trials of German civilians for the killing of parachuted American flyers, and trials of individuals such as Ilse Koch of the Buchenwald cruelties, and Otto Skorziny, the second Hitler.

These trials were held in what had been administration buildings of the concentration camp. One to eight courts were in progress five to six days a week. Trials lasted from one day to several months, with a board of American Army officers sitting as a court, American lawyers as prosecutors, and American and German lawyers as defense counsel. Witnesses were former camp inmates or displaced persons from various European countries. Interpreters translated the proceedings into the

various languages spoken. A review board at Munich scrutinized all proceedings before a final adjudication was made.

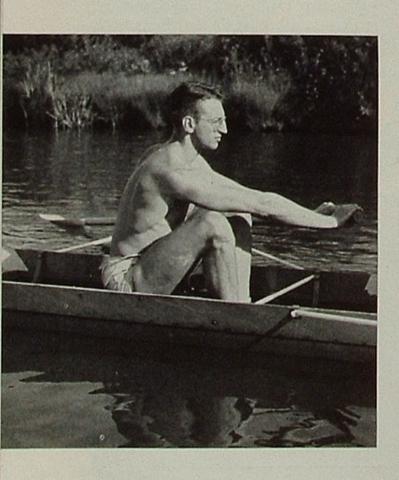
Dachau was also a clearing house for prisoners from the British, French and American Zones. American and Allied personnel in charge of the trials lived on S. S. Strasse, a street running just outside the camp, in billets formerly occupied by the German S. S. officers who had run the camp.

Miss Foster's assignment also afforded her an opportunity to visit other European countries—Denmark, Sweden, Czechoslovakia, Switzerland, England, Scotland, France and Italy.

For her, the passing years will never erase vivid memories of the rack and ruin of war, critical shortages of food and other necessities of life, and the day to day struggle for existence of people in war-torn countries.

Her return to a petroleum industry job in Casper, Wyoming, then to Union Oil in Salt Lake City, served to deepen the realization that God has blessed America.







of our Seattle Terminal, rowed at bow position in one of the world's best four-man crews of 1952. The crew-with-coxswain did their training on Seattle waters, where great oarsmen are a tradition, and won their way to the final Olympic

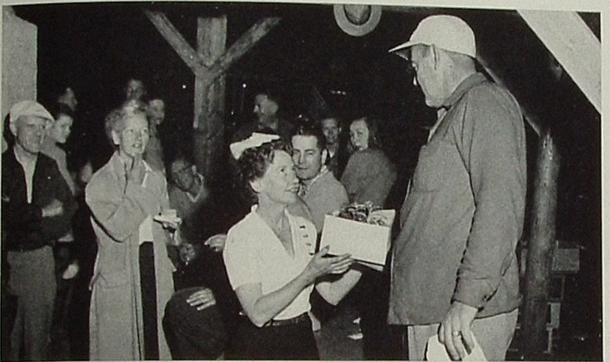
Games tryouts at Worcester, Massachusetts. They lost to the University of Washington crew by a mere four seconds—which crew made such a commendable showing at the Helsinki meet. Merely to participate was a great honor.

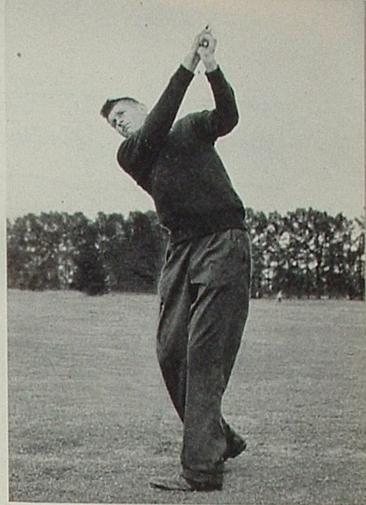
from Gudrun Larsen



CO-CHAMPIONS among Northwest Territory golfers for 1952 are Dave Sweeney, left, of Olympia and Jim Mallory, right, of Seattle who fired identical rounds of 68 to win the annual tournament.

Mallory is rugged competition in any meet, having also been runnerup in the Washington State Amateur Tournament held at Clarkston. He lost in match-play on the 41st hole, although 5 under his opponent's medal score.





women champs of the Northwest in the same tournament were Ruth Groth, seen collecting her second-prize for low gross from Bill Martin; and modestly worried in the background is the champ and first-prize winner herself, Gudrun Larsen, who, because of being our ON TOUR correspondent, asked us to forget the golf accomplishment. So, everybody forget it!

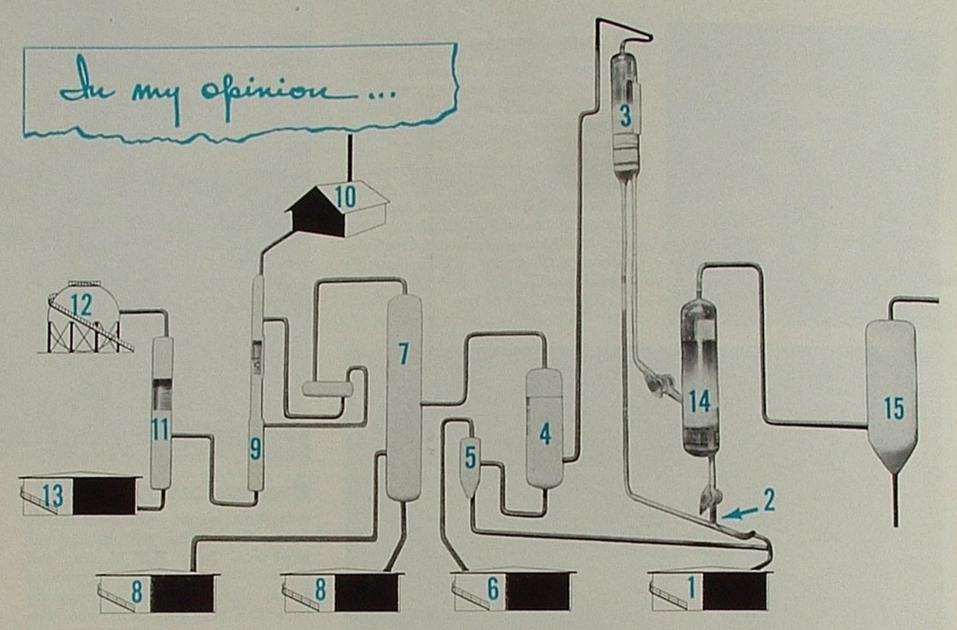
L. A. REFINERY FOREMAN

played baseball this year at their big barbecue. A passerby, seeing some 20 runs cross the plate, commented to one of the panting outfielders that his team must be taking quite a licking. "Stick around a few minutes, my friend," Elmer wheezed. "You see, our side ain't been up to bat yet!"





in name and in accomplishment, however, are these players captained by Bill Daneri. For the second year in a row they have won the Oleum softball championship. Players are, back row, Andrews, Herwat, Rike, Erickson, Daneri, Newman, Blackwood; front row, Raymond, Nisson, Cordes, Campbell and Villa.



Dear Editor:

Your model of the FCC process, appearing on Page 17 of the July issue, was a masterpiece of confusion and obviously not the cartooning of Author Fred Hartley. My eight-year-old son has done some re-numbering above and suggested the following corrections:

Feed stock from storage (1) comes in contact with heated catalyst at point (2). Oil vapors and catalyst then move up to REACTOR (3), where catalytic change is completed and catalyst is removed from upward flowing oil vapors.

Oil is separated into two streams in the AUXILIARY COLUMN (4), the heavier stream moving through a SLURRY SETTLER (5), whose bottoms, containing remnants of catalyst, are recycled, and whose tops of clarified slurry oil are sent to storage (6). Overhead vapors from the AUXILIARY COLUMN (4) are fractionated in the MAIN COLUMN (7) into two cuts of fuel oil (8) and a number of lighter fractions which proceed to the DE-ETHANIZER COLUMN (9). Ethane and lighter gases removed here are used for fuel in

refinery furnaces (10). The de-ethanized stock is stripped of its pentane gas in the DE-PENTANIZER COLUMN (11) and of its propane and butane-butylene fractions in similar columns not shown. The butane-butylene fraction is stored (12) for eventual processing into aviation gasolines. The stocks moving downward into storage (13) are cracked gasolines which, after further treatment, are blended into 76 and 7600.

Carbon-coated catalyst from the REACTOR (3) is conditioned for re-use and simultaneously re-heated in the REGENERATOR (14). The COTTRELL PRECIP-ITATOR (15) traps and removes catalyst dust from exit gases to prevent pollution of the atmosphere.

Simple, isn't it?

And by the way, Foreman "Red" Adcock of the Instrument Shop and Foreman Walter Heywood of the Machine Shop were key figures in the FCC startup organization. How come they didn't get in the picture? Your oversight also?

Anonymous

Dear Anonymous: Yes. Ed.



Mate Don Bennett

Dear Editor:

It's me again. You did a little better in August. However, on Pages 12 and 13 was there any excuse for misidentifying Vocalist Ann Hoffman as Vocalist Nancy Groff and vice versa? And on Page 4 are you proud of having given Mate Don Bennett such an alias as "Don George?" Have you had your vacation yet?

Anonymous

Dear Anonymous: No. Ed.



Nancy Groff



Ann Hoffman



BIRTHDAY AWARDS

SEPTEMBER 1952

Department	Location	Years	Department	Location	Years
NATURAL GA	IS & GASOLINE		Gundy, Howard	J., Los Angeles	reurs
Pastor James	C., Home Office	40	The state of the s	The state and a set of	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
			tarnau, Elmon	3 Onkland	The second second
CREDIT			**************************************	C P. United by Self-	10
Brunk, Charles	C., Home Office	35	Stars, Donaid C	Santa Maria	10
			Outcid, I Hyllis	M. Onn Francisco	10
PIPELINE			Accident John E.	Scattle	10
Doss, Ashley V.	, San Luis Obispo	35	MacWilliam, Ior	ie A., Seattle	10
Orens, William	H., Santa Fe Spring	gs30		& PRODUCTIO	
MANUFACTUR	RING		King Robert A	Santa E. S.	N
MANOFACIO	an Oleum	70	Atwill Edward	, Santa Fe Spring R., Texas	830
Connolly, Colen	nan, Oleum W., Wilmington	00	Cormier, Joseph	H., Cut Bank	25
Amlinger, Lee	, Oleum	25	Meadows, Gilbe	rt J., Orcutt	10
Grove, Clark D.	ert F., Wilmington	25	Plaugher, Rollie	B., Orcutt	10
Contact Joseph	F., Oleum	25	Starkey, Ephran	m G., Orcutt	10
Santos, Joseph	r, Oleum	25	Villien, Ferdinar	nd O., Texas	10
Winemers, Osca	F., Cut Bank	20	COMPTROLLE		
Vrieger John B	3., Oleum	15			20
Reaugh Myrl	A., Home Office	15	Accynorus, Geen	C., San Francisco	30
Collister, Leo F.	., Wilmington	10	RESEARCH &	PROCESS	
Collard, John B	., Wilmington	10	Hall, Richard E	., Brea	25
Dunn. Frederick	k, Wilmington	10	Warren, James	C., Brea	25
Miller, Harry A	., Wilmington	10			
Newman, Herm	an R., Oleum	10	TAX DIVISION		-
			Ely, Wesley All	en, Home Office	25
MARKETING			MARINE		
Reynolds, Frank	k A., Sacramento	30		ts I., Wilmington	20
Ethridge, Paul	E., Los Angeles	25	Gyllberg, Carl 1	I., Wilmington	15
Adolphson, Alb	ert D., Great Falls	15			
Combs, Charles	N., San Francisco	15	AUTOMOTIVE		
Gibbons, Gerald	M., Home Office	15	Blanchard, R. V	., Santa Fe Spring	5810

INDUSTRIAL SUMMARY—Continued

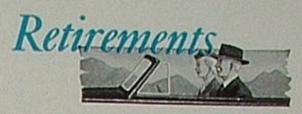
to use natural gas, from our production in the Belgian Anticline Field, for boiler fuel. A gas line has been installed parallel to our crude oil line from the Jewett and C.C.M.O. leases into McKittrick Station.

Telephone carrier instruments have been installed at the Coalinga Nose Unit and connected into Union's suburban telephone system in the San Joaquin Valley. This will provide telephone communication between the Coalinga Nose Unit and Coalinga area to Bakersfield, Los Angeles and other points served by our Company-operated telephone system. from Ronald D. Gibbs

Losses attributed to the steel strike have soared to 20 million lost tons of steel production. Possible further **PURCHASING** losses may result due to small stockpiles of iron ore. These direct losses are only part of the story, however. While none of our normal operations was closed down for lack of materials, our costs were increased. Foreign tubular goods ran about \$100 a ton more than domestic production. It cost more to collect and reuse old containers than it would have done to buy new ones. And costly also were postponements of new construction.

With a prompt return to full mill production it is expected that jobbers will be able to again build up their inventories. Large stocks of pipe, plate and miscellaneous items held idle on ships during the shipping strike are now moving into customer channels, somewhat easing present shortages.

from E. H. Weaver



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

MARVIN ROBINSON

Field Department Employed 1/23/28-Retired 8/1/52

GEORGE L. PARSON

Pipe Line Department Employed 9/13/16-Retired 9/1/52

JAMES B. FRAZIER

Pipe Line Department Employed 2/25/21—Retired 9/1/52

SAMUEL A. MERRIKEN

Southwest Territory Employed 6/22/22-Retired 9/1/52

CLARENCE A. RUDE, SR.

Pipe Line Department Employed 4/7/26-Retired 9/1/52

IN MEMORIAM

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

On July 27, 1952

NANA B. CASKEY

Home Office Retired May 1, 1931

On July 14, 1952 CHARLES JOHNSON

Santa Fe Springs Retired May 31, 1939

On July 22, 1952 REGINALD W. DAVIS

Marine Department

On July 10, 1952 WILLIAM JAMES BIFFORD

Oleum Refinery Retired June 30, 1945

On July 12, 1952 BEN F. LAYTON

Los Angeles Refinery Retired September 1, 1949

On July 12, 1952 EUGENE J. FULTON

Marine Department On July 12, 1952

WILLIAM A. LIGGINS Marine Department

On July 29, 1952 ROBERT B. CHIDESTER

Cut Bank Refinery

On July 12, 1952 ROLLIE YARGER

Marine Department July 1952

RONALD M. FLEMING Oleum Refinery Military Leave 1/25/52

HAVING TROUBLE WITH YOUR

FAMILY BUDGET?

Maybe this will help	Total 1952 ta	x bill for average A	merican family with	income of:
explain why	\$3,500 PER YEAR (\$67.30 per week)	\$4,500 PER YEAR (\$86.54 per week)	\$7,500 PER YEAR (\$144.23 per week)	\$15,000 PER YEAR (\$288.46 per week)
Federal income tax.	\$295	\$446	\$839	\$2,516
State and local income tax.	4	9	30	90
State and Federal corporation income taxes which average family pays indirectly in the prices of the products it buys.	249	354	769	1,584
Sales and excise taxes. (Retail sales taxes; taxes on cigarettes, liquor, cosmetics, gasoline, leather goods, etc.)	302	378	634	1,202
Contributions for social insurance.	140	159	207	294
Property taxes. (If a family rents its home, farm or apartment, it may not pay all these taxes directly. But it pays them indirectly, for the landlord has to include them when he sets the rental price.)	104	144	285	808
Estate, gift and inheritance taxes.	4	4	37	124
AVERAGE FAMILY'S TOTAL TAX BILL THIS YEAR	\$1,098	\$1,494	\$2,801	\$6,618

YOU KNOW?

That more than 3 dollars in taxes of all kinds will be collected this year for every 2 dollars that were collected in 1949.

That almost 10 dollars in taxes of all kinds will be collected this year for every 6 dollars that were collected in 1945—the peak year of World War II.

That almost 4 dollars in taxes of all kinds will be collected this year for every 1 dollar that was collected in 1942.

That, on the average, approximately 1 dollar out of every 4 dollars you pay for gasoline in the West goes for State and Federal taxes.

This is one of a series of Public Information advertisements sponsored by the people who make 7600 Gasoline and Royal Triton—America's finest motor oil.

UNION OIL COMPANY

OF CALIFORNIA

Sources: "Fiscal Facts for '52," The Tax Foundation, New York City. "How Much Government?" National Industrial Conference Board, 1952.

