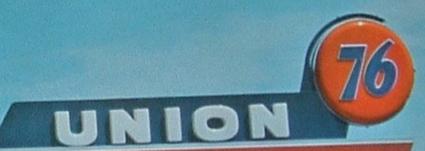
SEVENTY Union Oil Company of California SIX

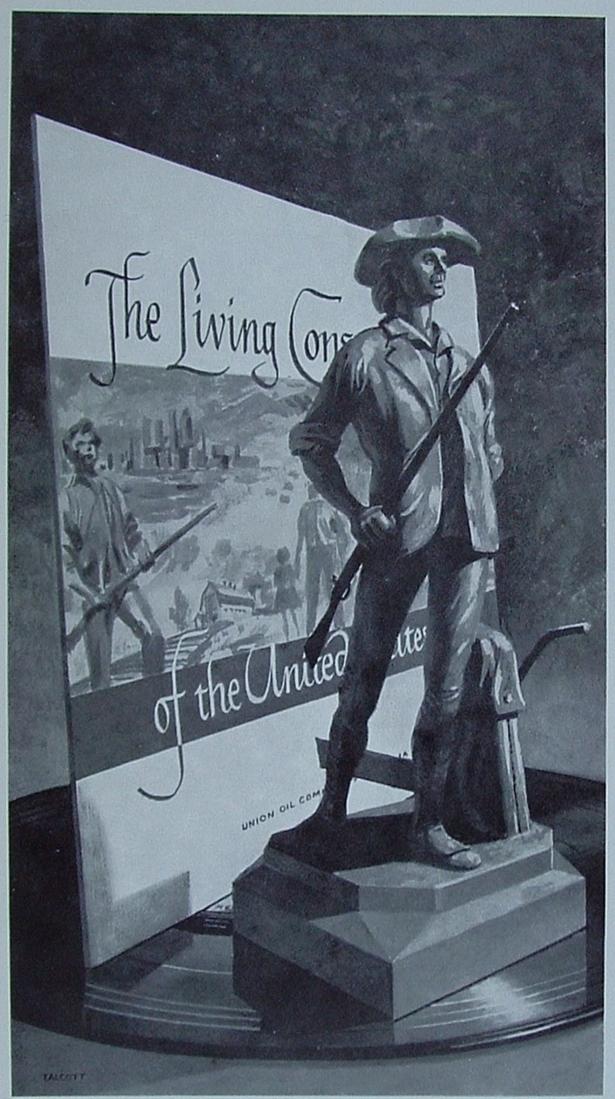
August, 1962



MINUTE MAN SERVICE



The Living Constitution



...a weapon in the fight for men's minds

In the battle for men's minds, which the Communists wage relentlessly, perhaps one of our most potent weapons is the Constitution of the United States.

But, frankly, when did you last read the Constitution?

To enable more people to know and appreciate the principles that established the American concept of freedom of the individual, we decided to promote a recording—The Living Constitution.

A cast of eight voices reads the words of man's most inspired document for the government of a free people. The words become really understandable, personal, meaningful, moving. As you listen, "shivers run up and down your spine."

This is the album Union Oil dealers made available to their customers for six weeks this year at about one-sixth its usual retail cost. Thousands were distributed every week.

Scores of editors, businessmen, educators and churchmen told us this was a "tremendous public service."

This is but another of many public services we are proud to render.

YOUR COMMENTS INVITED. Write: President, Union Oil Company, Union Oil Center, Los Angeles 17, California.

Union Oil Company of CALIFORNIA

PONTERING FROM 1919 (FROM 1919)

MANUFACTURERS OF ROYAL TRITON, THE AMAZING PURPLE MOTOR OIL

SEVENTY® Union Oil Company of California SIX

Volume 6, Number 8

August, 1962

THE COVER: On Highway 99 at Gorman, near Holland Summit, this "76" station serves an entrance to Grapevine Canyon. For an historical ride down the canyon and a view of the valley beyond, we suggest you turn to Page 4.

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is a Union Oil Company of California trademark. It also symbolizes the American freedoms won in 1776, which made possible this nation's industrial development and abundance. Our SEVENTY-SIX magazine, published monthly, mirrors industrial freedom through the thoughts, skills, accomplishments and appreciations of Union Oil people. We invite readers to participate with us in an exchange of ideas and information. Address correspondence to The Editor, SEVENTY-SIX, Union Oil Center, Los Angeles 17, California.

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Written especially for Seventy-Six by John Edgar Hoover, Director, Federal Bureau of Investigation, United States Department of Justice

AMERICAN INDUSTRY BULWARK AGAINST COMMUNISM

Communists the world over predict with utmost confidence that the "complete victory of socialism" is inevitable. They sneeringly gloat over the "steady crumbling" of the Western capitalist nations, while they point with pride to the growing strength of the communist camp. After all, these conspirators boast, communism has already extended its rule to more than a third of the world's population and one fourth of the earth's land surface. And this in only forty-five years as a state power!

The communists, however, are well aware that the United States remains a chief obstacle in their drive for world domination. This Nation whose democratic principles uphold justice and human dignity represents a mammoth roadblock to communism's aim of enslaving

continued on page 22

A. C. Rubel re-elected President

A. C. Rubel is the new president and chief executive officer of Union Oil Company. His election by the Board of Directors to succeed the late Reese H. Taylor brings to the helm one of the industry's most experienced and respected oil men. The appointment became effective June 25, 1962 at the Board's regular monthly meeting.

Mr. Rubel served as president from August 1956, until his retirement in March, 1960. Although allegedly semi-retired since the latter date, he has maintained a full schedule of business and public activity. His continuing services as a member of the Board of Directors and of the Executive Committee have kept him intimate with Company operations and decisions.

The new Union Oil president brings nearly 40 years of Company experience to the office. Besides his executive experience and maturity, he possesses other invaluable assets: broad acquaintance and high esteem in industry coast-to-coast as well as on foreign shores; a pleasing friendliness in the dealings with all classes of people; and the knack of inspiring his associates to their finest endeavors.

A Louisville Kentuckian by birth, young "Cy" Rubel attended Purdue University in 1914 and 1915. He transferred then to the University of Arizona, where he received his B.S. degree in mining and metallurgy in 1917. This latter university honored him as an outstanding alumnus in 1960 and conferred upon him the honorary degree of Doctor of Science.

World War I interrupted his first job as an assayer with Magma Copper Company in Arizona, He joined the U.S. Army Corps of Engineers in 1917 and, upon returning from France in 1919, was a Captain in the 79th Division of the 304th Engineers. He received the Distinguished Service Cross. In World War II, he served as vice chairman of the Military Petroleum Advisory Board.

Following four years of geological exploration in Mexico, Rubel joined Union Oil in February, 1923, as an assistant geologist. He rose to petroleum engineer, chief petroleum engineer, assistant manager field operations, manager field operations and, in 1936, director of production.

In 1938, a few months before Reese H. Taylor took office, Rubel was elected to the Board of Directors. He has served continuously on the Board since that time, also serving as vice president in charge of exploration and production from 1939 to the beginning of his first term as president in 1956.



His leadership has been drafted by many organizations outside the Company:

He is a member and former director of the American Institute of Mining, Metallurgical and Petroleum Engineers, whose membership honored him with the Anthony F. Lucas Gold Medal Award in 1960.

He is a trustee of Occidental College, Southern California Cancer Research Institute, and Southern California Orthopaedic Hospital.

He is a director of Northrop Corporation and Kobe Corporation, and a former director of the Merchants and Manufacturers Association and of the Los Angeles Chamber of Commerce.

His other affiliations and services include active participation as an Executive Committee member in the Los Angeles Area Council of Boy Scouts of America; and chairman of Southern California Committee of the Freedoms Foundation at Valley Forge.

W. L. Stewart, Jr., Chairman of the Board

W. L. Stewart, Jr. is the new chairman of the Board of Directors, having been elected to that position June 25. As the presiding member of the Board, he maintains a continuity of Stewart executive relationships dating back to the earliest formative years of Union Oil.

Mr. Stewart's grandfather, Lyman Stewart, came west from Pennsylvania in 1883. He was one of the founders of Union Oil Company, and served as its president between 1894 and 1914, and later as chairman of the Board.

He was succeeded as president by W. L. Stewart, Sr., who held the office until his death in 1930.

A characteristic of Stewart leadership throughout the Company's 72 years has been to reward employee effort and loyalty with the highest possible incentives and the finest of working conditions.

Born where the Company was founded, at Santa Paula on June 27, 1897, young Bill Stewart grew up on a diet well flavored with petroleum. His first ventures from home, during summer vacations from Pasadena High School in 1914 and 1915, were sea-going—not in the romantic manner, but as a wiper or oiler aboard the Union Oil tankship SS ARGYLL. He worked as a trainee at Oleum Refinery in 1916; and as a roustabout and tooldresser in the oil fields in 1917.

War twice interrupted Stewart's working career. In 1918 he was a second lieutenant in the Aviation Section, U. S. Signal Corps. From 1935 to 1941 he served as U. S. Naval Reserve — Lt Commander, U. S. Coast Guard, and held Reserve status from 1943 to 1946. Also, from 1941 to 1945, he was chairman of the Refining Committee, District V Petroleum Administration for War, and a member of the Petroleum Industry War Council.

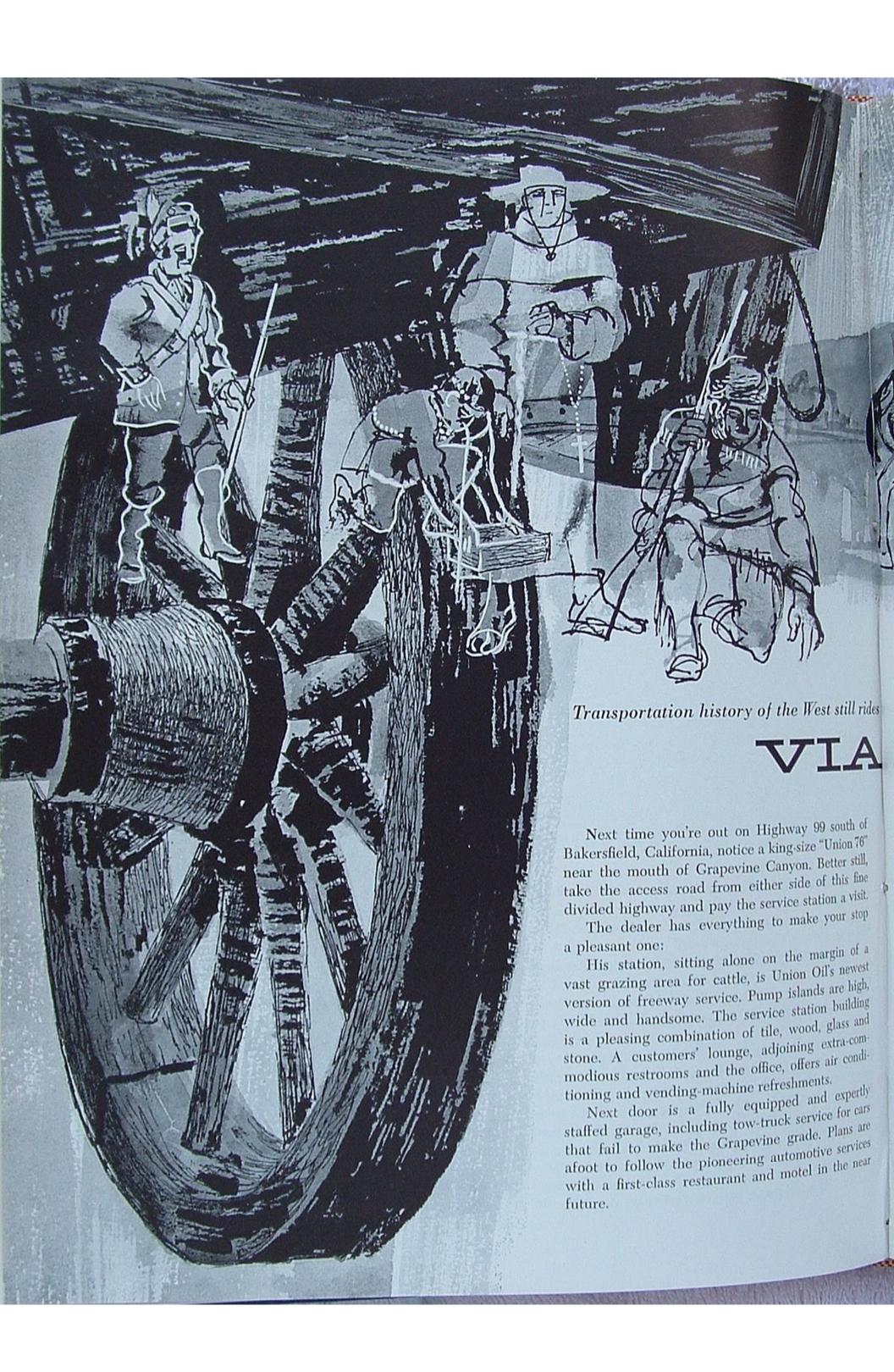
Following World War I and a turn as pipefitter foreman at Los Angeles Refinery, Bill entered Stanford University for one year, then enrolled at Massachusetts Institute of Technology. He was graduated from M.I.T. in 1923.

He took a steady job with Union Oil in 1923 — as research assistant for three years. A series of responsible assignments followed; secretary of the Manufacturing Committee in 1926; a director in the same year; executive assistant in 1928; director of Manufacturing and member of the Executive Committee in 1929; vice president in 1930; executive vice president in 1942; senior vice president in 1955; and vice chairman of the Board in 1956. The following year he retired as an officer of

the Company, but continued his activity as a director and a member of the Executive Committee. Mr. Stewart served as a director from 1960 until his recent election as chairman.

Mr. Stewart's many services to the oil industry included a 1939 to 1956 term as a director of the American Petroleum Institute and eight years as a first chairman on Smoke and Fumes Committees sponsored by API and locally by Western Oil and Gas Associates. Currently he is a life member of the Massachusetts Institute of Technology Corporation, and a director of Stanford Research Institute as well as a member of the Executive Committee of the Board of Directors of Stanford Research Institute.







THE GRAPEVINE

Aside from the station itself is a scene that belies what has happened here over the past 300 years. Hosts of blue lupine and other wild flowers blossom in the spring as they have done for centuries. Neighboring mountains are steep, storm-cut, uncultivated. Only barbed-wire fences and fine cattle give any hint of the historic cavalcade that has swept by.

Actually this Sign of the 76 marks hallowed ground. It is the discovery site of Kern River Basin and San Joaquin Valley, undoubtedly one of the richest land areas on earth. Nearby Highway 99, in the receding past, has counted a multi-million stream of cars and trucks the dusty, grinding progress of covered-wagon trains the hoof-marked trails of American trappers and Spanish explorers - the moccasined imprints of Yakuts and Piautes, Indians who thrived on the region's wealth of game, acorns and piñon nuts.

A few historical reminiscences about the Grapevine

should add interest to your visit:

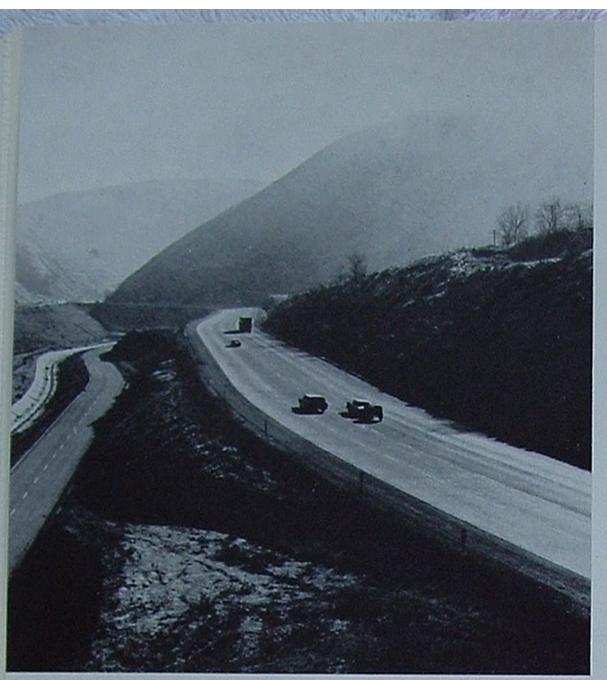
Old Spanish diaries credit Pedro Fagis, an officer with the Portola expedition from San Diego to Monterey

in 1769, as being the first white man to enter San Joaquin Valley. Pursuing two soldiers who had deserted the expedition near San Fernando, he came through a tortuous mountain passage he called Canada de las Uvas (Grapevine Canyon) and looked out across broad, virgin fields. Attracted by Buena Vista Lake to the northwest, he continued to an Indian village near its shore, then entered the mountains to rejoin Portola.

That Fagis failed to capture his two deserters and indeed was possibly third in the line of discovery is suggested in the journal of Father Francisco Garces. This exploring padre and a companion came through the Grapevine in 1776 and camped with some Indians on Kern River. The Indians told him of having killed two Spanish soldiers who tried to pay for Indian hospitality with abuse. A monument to Garces' memory marks Highway 99 in Bakersfield.

Following several other Spanish visits between 1804 and 1816, relations between the Missions and the San Joaquin Valley Indians were frequently touch-and-go. The former needed laborers for their mission projects

Continued



At the mouth of Grapevine Canyon today, trails left by past generations of travelers stand beside new Highway 99.

Via the Grapevine-continued

and the latter needed horses. A little over-zealousness on both sides probably gave some of the mission leaders a reputation as "task masters" and some of the aboriginees the title of "Horsethief Indians." Anyway, the Grapevine became a well beaten trail.

A biblical and gun toting trapper named Jedediah Smith was the first Yankee to come through this passage-way for business reasons. Having ventured west via Great Salt Lake to San Gabriel Mission, he received permission from the Mexican governor to return by the same route. But, as free-thinking men were wont to do in those days, Smith detoured northward through the Grapevine in 1827 to find a valley of streams swarming with beaver.

Word of the discovery leaked northward to Hudson's Bay Company and, by slower eastward channels, to Atlantic Coast fur men. So when Ewing Young and Kit Carson hurried overland from the East in 1830, they found Hudson's Peter Skene Ogden already busier than a beaver with his trap lines along the Kern River system.

During the ensuing decade of trapping, Joseph Reddeford Walker, a trapper and pathfinder, blazed the Walker Pass route over the High Sierras. Another trapper, Peter Lebec, made history chiefly because he was killed by a bear in 1837 and left both his grave and his name to the Tejon Pass community we still call Lebec.

Trappers and trapping alerted the Mexican governor to the danger of losing an immense domain. So in 1842 Governor Juan B. Alvarado began a series of land grants to his countrymen. The first, named Rancho San Emidio, embraced the huge Maricopa area where Union Oil's Lakeview Gusher gave up over nine million barrels of oil in 1910. The original owner, Jose Antonio Dominguez, died a year after receiving title to the land.

Another interesting Spanish grant was Rancho El Tejon, whose nearly 100,000 acres included the site of our new Grapevine Service Station. The recipients of this and many similar ranchos turned out to be absentee operators; few developed their lands and most sold out to the highest bidders.

The man who climbed Grapevine Canyon with more enthusiasm than any of his predecessors was John C. Fremont, the famed explorer. His party crossed San Joaquin Valley in the spring of 1844 — found vegetation thriving everywhere in the rich soil — walked across rolling hills carpeted with grass and wild flowers — forded countless mountain streams. Fremont was so impressed that he returned to the area in 1845 — and again in 1854 to buy a half of Rancho San Emidio.

Another famous American, John James Audubon, the naturalist, walked out of the canyon in 1849 to behold one of the greatest habitats of birds and animals he had ever seen. While others rushed to find gold, he sat and painted it for eternity.

But it was gold, nevertheless, the metallic variety, that brought permanent settlers running. Gold and a treaty of peace with Mexico — plus stories false and true, but always fascinating, from explorers and fur men — were more than adventuresome, life-loving, fortune-hunting Americans could stand. They came afoot, on horses and in wagon trains. And a good percentage of the ones who settled in San Joaquin Valley came through Grapevine Canyon.

One large wagon train that sought a shortcut against the advice of its captain blundered into Death Valley. Death took the heaviest toll among them when they escaped desert thirst and heat only to encounter a nearly impassable mountain barrier — the High Sierra.

In 1854, "To suppress stock rustling and protect the Indians," the United States established Fort Tejon near the mouth of Grapevine Canyon. It swiftly added social and political character to its military function and became the most popular caravan stop between Los Angeles and Fresno. The fort was abandoned in 1864, but Tejon Ranch, present owners of our Grapevine Service Station site, bought and preserved the property. In 1939,

five acres of ground and the old buildings were given by the ranch to California as an historical monument,

One reason for the abandonment of Fort Tejon was the founding of Kern County's principal city. When Colonel Thomas Baker and his family reached the Kern River in 1863, they found two settlers there ahead of them. One of them, Christian Bohna, after about two years of pioneering, was glad to sell his holdings to the Bakers. The latter had no more than moved into their second-hand home before the other settler from nearby China Grade Bluff drove up and said, "I have brought you a start in life." The visitor handed over two hogs, six hens and a rooster. Mrs. Baker, owning the only sewing machine in a hundred miles, promptly extended its use to the good neighbor's wife.

Those seeds of hospitality lived and prospered. Practically every traveler who came through Grapevine Canyon thereafter pastured his animals in Col. Baker's field and partook of a night's rest or a midday meal. That's how the principal city of Kern County got its start and became known as Bakersfield. To the hundreds of Union Oil people who have lived and worked there, the original spirit of friendliness prevails.

Countless other epics of the West took place within gunshot of our new Grapevine pump island:

Through the pass in 1858 came Overland Mail Company's first Butterfield Stage enroute from St. Louis, through Los Angeles, to San Francisco. Wrote Watermann L. Ormsby, special correspondent of the New York Herald and the only through-passenger on this trip: "The price of hay here is \$43 per ton and barley six cents per pound." The stage line survived three years.

Twenty-eight camels were imported to Ft. Tejon in 1857 for experimental use as "ships of the American desert." They were no match for mules, oxen or horses.

Popular American author Mary Austin lived on Rancho El Tejon around 1888 to sense the real thrill of western life. Of a stagecoach ride down the Grapevine, she wrote:

"If you happened not to know enough to engage in advance the seat beside the driver, the trip was rather a horror, crowded into the stuffy interior between 'old timers,' liquor salesmen, mining experts, an occasional stray 'girl' from the local bawdy house, or one of those distressed and distressfully pitiable 'lungers' of whom you had the grace only to hope that he wouldn't die on your shoulders. Outside there was a magnificent panorama and often very good entertainment. Among the purveyors of story material, stagecoach drivers bear the palm."

If Mary Austin could ride with us through the Grapevine today, she'd see practically no change in the magnificent panorama. But what would she think of the old road — now divided and carrying four lanes of traffic in either direction?

We'll bet you she too would stop at that king-size Sign of the 76 — if only to marvel at the changes time has wrought — or to think back upon two nameless Spanish deserters who lead their captain to a great discovery.

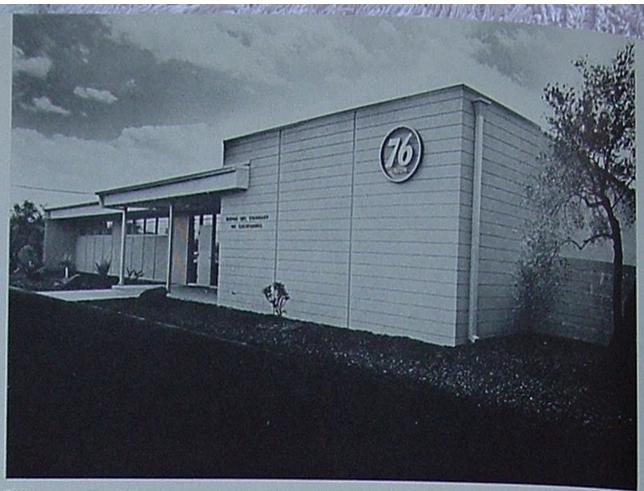
/THE END

A big Sign of the 76 marks the discovery site of San Joaquin Valley. The hospitality and service offered here carry on a tradition set by the founder of nearby Bakersfield in 1863.



Pioneer of 1962 is Fleetwood Garner, first with the Finest.





This modern building houses Union Oil's offices—retail and commercial—for the "Valley."

In one of California's oldest settings, Union Oil Company has designed and built the

Finest marketing station

Even if you have lived in Southern California, it's a safe bet you couldn't name the ninth most populous community area in the United States — a valley whose population of 912,000 is exceeded by only eight cities in the entire nation.

If you like guessing, here are some clues:

The area was first visited by Portola in August, 1769. Father Juan Crespi, who accompanied the explorer, described the valley as pleasant and spacious; he named it Valle de Santa Catalina de Bonnia de los Encinos. Later the name was abbreviated to Los Encinos Valley, meaning valley of the oaks.

Gold was discovered in its Placerita Canyon in 1842, six years before the Sutter Mill find that started the Gold Rush. Its mission site, founded in 1797, witnessed the completion of a Southern Pacific railway tunnel in 1876, linking Los Angeles to San Francisco, and the building of a great aqueduct from Owens Valley in 1913 to bring an ample water supply.

The valley, whose population has more than doubled every 10 years since 1930, is boxed in by high mountains, has a score or more of community names, is governed by three cities, has no political identity of its own.

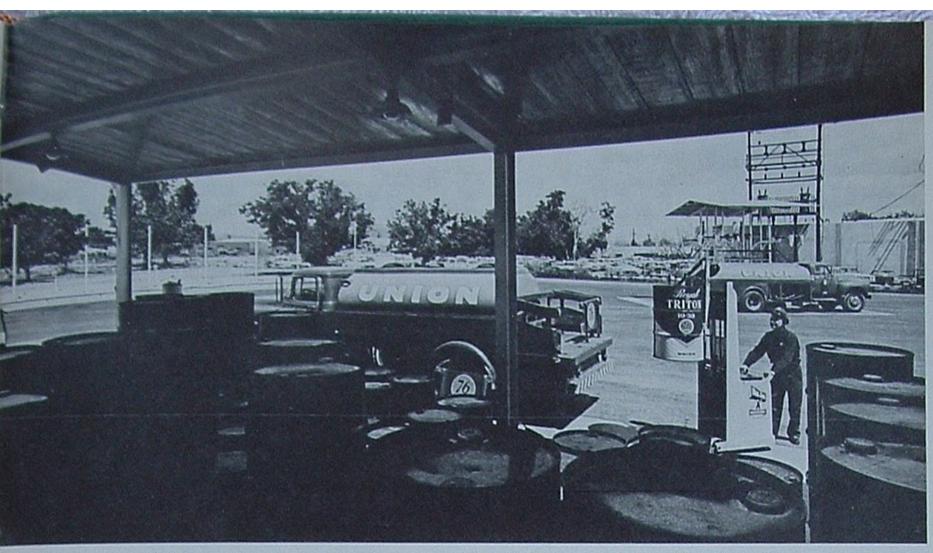
Guessed it yet?

Well, San Fernando Valley is the correct answer. Twenty-two miles long by 10 miles wide, this remarkable collection of suburban communities belongs partly to the cities of Los Angeles, Burbank and San Fernando, and includes the unincorporated area of Studio City with an official population of three persons. Though isolated by natural mountain barriers from neighboring valleys, it is only a few minutes by automobile from Hollywood, Los Angeles, Pasadena and Ventura, Three freeways—the Ventura, San Diego and Golden State—link it intimately with a metropolitan area expected to become the world's largest.

It is here — at 7857 Haskell Avenue in Van Nuys, California — that Union Oil Company officially opened its new San Fernando Valley Marketing Station on May 12, 1962. Centrally located in the valley and within quick access of the freeway system, this station is designed both for today's needs and tomorrow's growth. It replaces five former marketing stations — at Burbank, Glendale, San Fernando, Van Nuys and Canoga Park—and concentrates sales and commercial distribution into a single, modern outlet.

The new San Fernando plant is ultra-modern in many respects:

All of its bulk petroleum storage tanks, with a total capacity of 110,000 gallons, are buried underground, providing the plant with greater safety, more working space and a neater appearance. Transports fill the tanks through gravity-flow, while the loading of delivery trucks and filling of barrels is accomplished with submerged pumps. An automatic eye-level gauge is installed above each underground tank.



A unique feature of the new plant: covered, ground-level storage for package goods. Trucks are loaded and unloaded with power hoist.

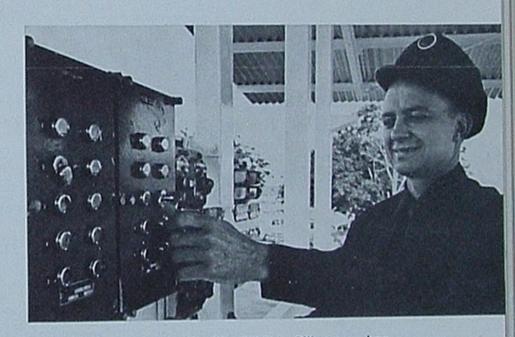
in the valley

The plant's warehouse departs from yesterday's thinking and costs by providing ground-level storage for barreled and packaged goods. The storage area, open on three sides, depends on rapid turn-over of stock to defeat exposure, and the plant's stout wire fence to discourage mischief and thefts. However, the warehouse includes an air-conditioned yard office, a restroom for drivers, and a closed storage room for sales-promotion supplies, etc. A push-button communications "talkie" connects the warehouse with front office and loading rack. There are also 10 metered barrel fillers adjoining the storage floor and a powered hoist to handle the loading and unloading of trucks.

Another interesting innovation is the loading rack. Called a keylock loader, it permits drivers to load their own trucks without preparing load sheets. Each uses an individual key to actuate the pumps and meters. The commodities and gallonages are automatically charged to the respective key number at an accounting desk in the front office.

The office facing Haskell Avenue is pleasantly representative of modern industry and the new Union Oil appearance everywhere. It is handsome, functional, spacious, comfortable. A partition separates the retail and commercial rows of desks. The large conference room inside and parking patio outside hint of even greater things to come for San Fernando - today referred to by most of its citizens as simply "the Valley."

/THE END



Each driver—such as O. W. (Wally) Silleman—has his own key to a "key-lock" device on the loading rack. Key actuates pumps and meters, and sends a signal to gallonage recording board Gerta Knox is reading inside the office.





Keep cool and follow these suggestions for pleasanter summer driving

It's hot, and you're stuck in a long line of traffic on your way to the ball game. Your engine starts to gasp and shake. You pump the throttle and she dies. What do you do now?

Or you're headed into the mountains. You're on a long grade and the temperature gauge is climbing. You're worried. What do you do now?

We called the Research Department the other day and asked some of the engine experts what you can do to avoid summer troubles caused by engine overheating: boiling radiators and "vapor lock."

Keep cool, they said. Don't panic. An overheated driver causes himself more trouble than his overheated engine does.

TUNDER

usually isn't vapor lock at all, they said, It's hot stalling.

On a hot day, when you're idling in a traffic jam, the underhood temperature goes way up. Fumes from the carburetor spill over into the intake manifold, and the engine gets too rich a mixture. It idles rough. Often, it stalls and doesn't want to start again.

If your engine dies, be gentle with your right foot. Push the gas pedal to the floor slowly. Leave it there while you work the starter. This will pump the extra-rich mixture from the manifold and cylinders. If the engine doesn't catch in about a half-minute, let the pedal up and turn on the starter again.

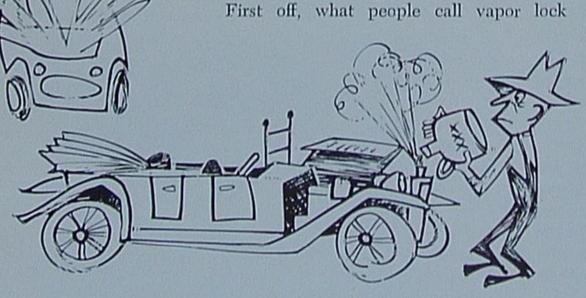
Repeat this routine a few times and she should start. But don't get frantic and pump the gas pedal. That way lies nothing but grief.

True vapor lock is relatively rare. But if your engine does vapor lock, try to cool the fuel pump and gas lines. Wet rags wrapped around them will usually do it. If you have no water, you can wet the rags with fruit juices or soft drinks. Messy, but it works.

Now, the gasoline commercial:

Vapor lock isn't common among Union Oil customers because of the way the Company blends its gasolines. Protection against vapor lock is built-in.

The gasolines are blended to give the best performance according to the season and to the geographical area where they're sold. You buy a different blend along the Washington and Oregon coast than you do east of the Cascades, for example. And you buy one





THE HOOD?

blend in Los Angeles and another in hot Palm Springs where the danger of vapor lock is greater.

About cooling system troubles:

There's a cure for overheating that usually works: don't let your engine idle slowly while you sit there in traffic. Speed it up every now and then. No need to race it hard. But do keep it running at a fast idle for from 10 or 15 seconds to a half-minute. (If your car has an automatic transmission, put it in neutral before you idle the engine fast!)

When you speed up the engine you also speed up the fan and the water pump. A stronger breeze flows through the radiator and across the engine, sweeping away hot, stagnating air. The water is circulated and cooled faster.

The same principle - higher engine speed means greater cooling - also applies when you're climbing long grades in the mountains. Even though the car seems to be pulling easily, drop into a lower gear. The engine revs faster and you get better air circulation under your hot hood.

A lot of radiator trouble - like hot stalling

is caused by panic.

Whether you're driving in traffic or up a long mountain grade and the heat indicator starts to climb - relax. Your engine should run hot under those conditions. As long as the car's going all right and no steam is pouring out from under the hood, keep moving.

DON'T stop and take off the radiator cap

the cooling system and risk a severe scalding. When you or your dealer put water in the radiator, DON'T fill it to the brim. Leave an inch or so for expansion. If the radiator is completely full, expansion will cause it to overflow when the water gets hot. You'll lose protective chemicals that are in your cooling system and increase the possibility of undesirable deposits.

When you stop, let the engine run at a fast idle for a few minutes before you turn off the key. If you cut the engine immediately, the water soaks up additional heat from the metal, and chances are you'll have a real Old Faithful on your hands.

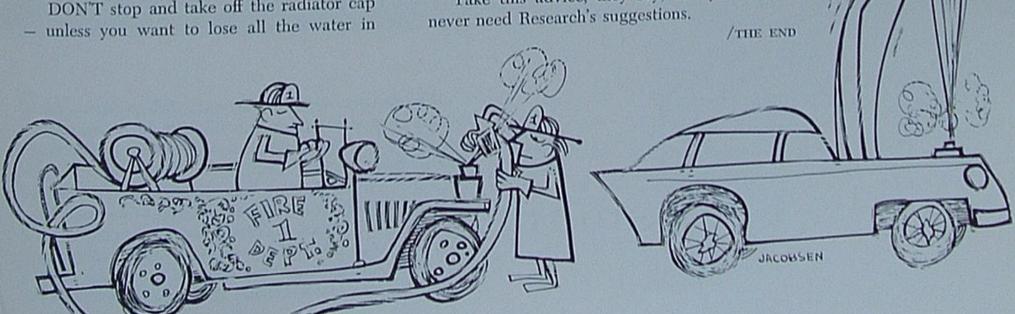
Again, the fast idle brings that stronger flow of cooler air through the radiator and takes the dangerous edge off underhood temperatures. A simple rule: idle the engine fast — until your temperature indicator needle starts to drop. Then shut off the engine.

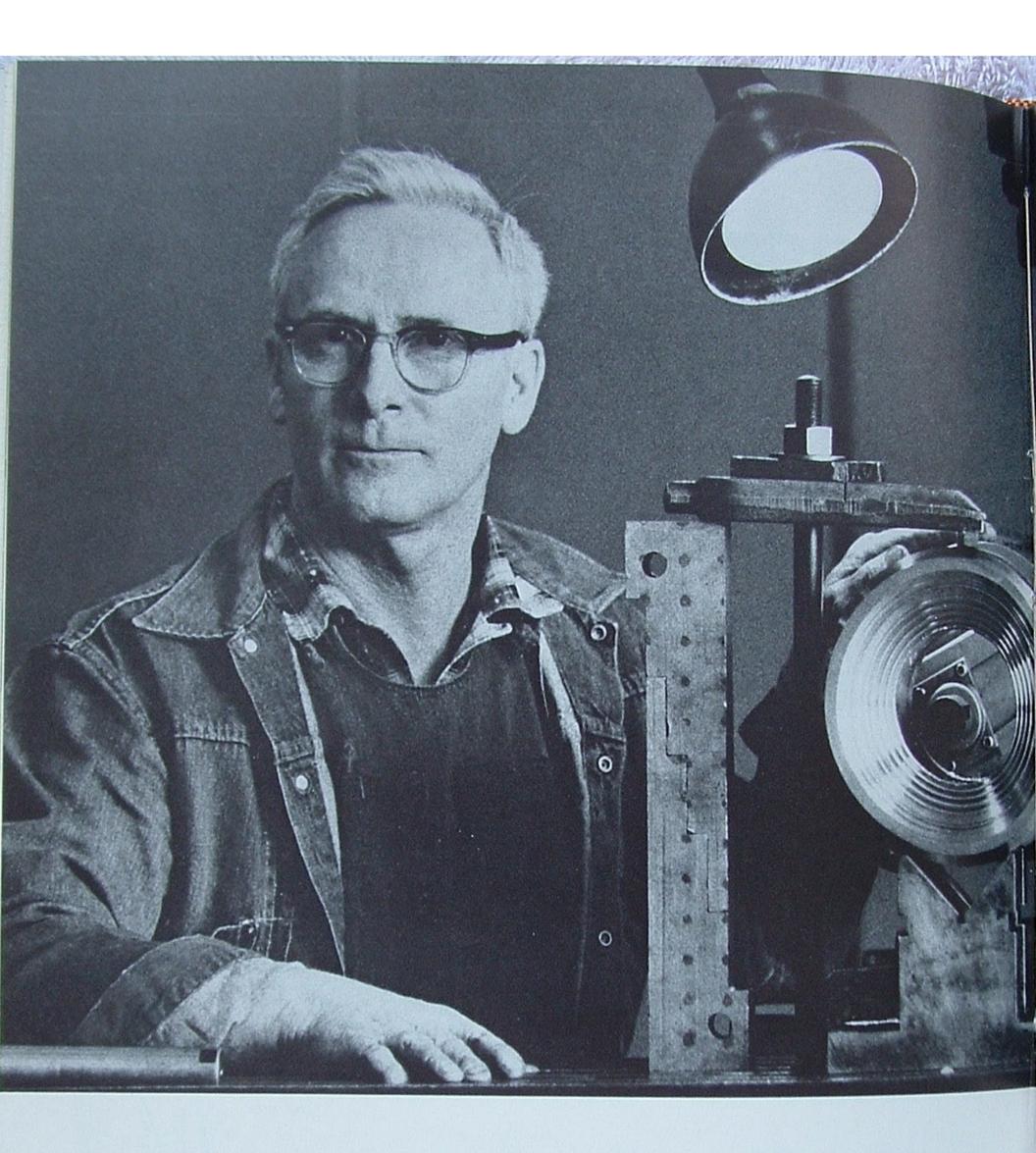
The people in the Marketing Department who have at heart the interests of Union Oil dealers - who like to make a buck now and then - suggest you take preventive measures.

Now that summer is here, they say, and before you start your vacation, have your car's cooling system drained, cleaned, and refilled so it can work efficiently. Be sure radiator hoses and fan belts are in good condition. Have your radiator checked for leaks - small leaks can become serious when the radiator's hot and under pressure.

Take this advice, they say, and you may

11





Portrait of a Craftsman

The pictures on these pages are different from most of the pictures we print in SEVENTY-SIX. Ordinarily, we look for action, for scenic value, for pictures that tell a story.

But in their own way, these pictures do tell a story. They're portraits of craftsmen, of men who work with their heads and hands - and who are wonderfully elever with both. Anyone who criticizes the quality of American workmanship has never met artists such as these.

All six men are machinists at Los Angeles Refinery.





Ward Casey . . . accuracy within a millionth of an inch

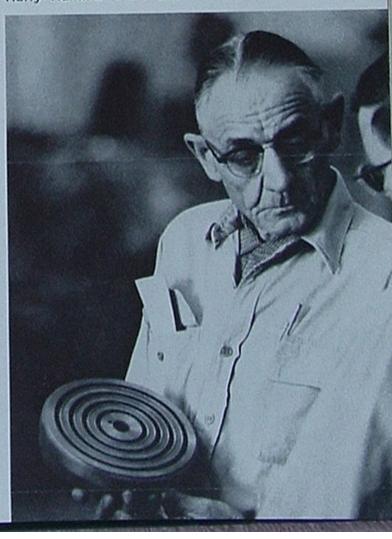
Don Weir . . . the machine had limitations. He removed them with his invention.

We could have gone into the welding shop, the pipe shop, the electric shop, or into any of the other Maintenance Department shops to take pictures of the men who keep the refinery's machinery running. But these six craftsmen are typical — and typically ingenious.

Take Don Weir. Don has been a machinist for 35 years, the last 10 of them with Union Oil. He's a stocky, gray-haired man with brown eyes. Usually, those glasses are riding low on his nose as he steps around his milling machine with marvelously quick, delicate movements.

Continued

Harry Hammer . . . difficult to pose



Portrait of a Craftsman continued



Ray Tobin . . . plastic for steel

The machine itself, as it was originally designed, had limitations. It couldn't handle some jobs; they were sent outside the refinery to larger machine shops.

Don put together a piece of paper, a pencil, and those 35 years of experience and designed a device for the machine. He calls it a "milling and boring head," and you can't buy another like it any place. It's a product of his head and his hands, and it triples the value of the machine.

After he designed the head, he built it: case, gears, everything. With supreme accuracy. It had to be accurate, he says, because unless the tool is right, the finished job can't be right.

Accuracy?

Ward Casey does the finishing — the lapping — on metal parts that must mate perfectly, so gasoline or steam, for example, can't escape between them.

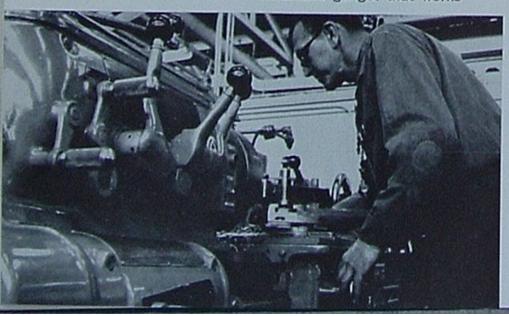
Using an almost flour-fine abrasive mixed with oil, Ward laps the surfaces until they're so flat only light waves can measure the degree of his accuracy. He finishes those surfaces to within a millionth of an inch of perfection!

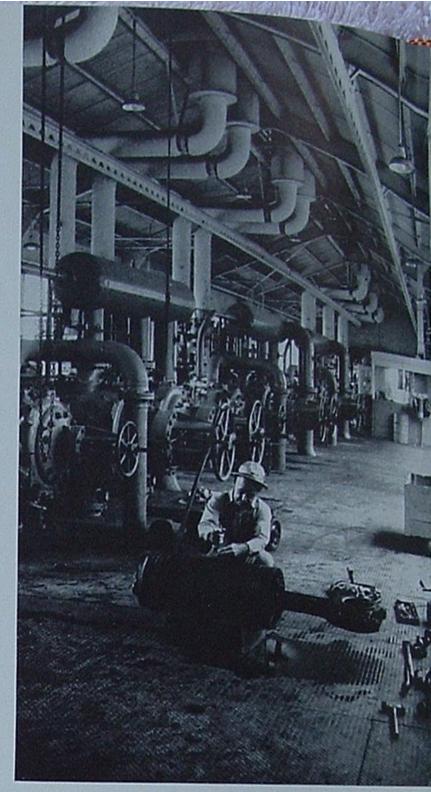
There is a direct connection between the head and the hands of true craftsmen. What they can think of they can make, even if such a thing never existed before.

Ray Tobin — valve shop foreman who retired May 31 — wondered if he couldn't improve valves that were wearing out too fast.

He thought of making the valve seat of a plastic instead of steel; the steel was attacked by corrosive materials that wouldn't bother plastic. He tried it. It worked. Result: a type of valve that wore out in two weeks now lasts two years.

Nick Zankie . . . homemade gadget that works





Richard Burgess . . . with hands, head and pride

Nick Zankie (we show him at his lathe) is machining another homemade gadget for check valves. Before the machinists began replacing the original equipment part with our own, check valves sometimes broke within two days. Now Nick says, "We don't know how long they'll last. None of our stuff has broken yet."

Whether they're at their machines or "up on the hill," as Richard Burgess is in his portrait, watch and you see another characteristic of the craftsman: pride in his work.

Harry Hammer said it his way. Hammer is — or was — machine shop foreman. Like Tobin, he retired May 31. We wanted to show Hammer with a micrometer checking the accuracy of a cut being made on a lathe. He wouldn't pose.

"I never do that," he told us. "I don't check the work. These boys know their stuff. I tell them what I want and then I get out of the way. If the finished job satisfies them, I know it'll satisfy me."

He understood the men in the machine shop. They work with their heads, their hands, and their pride. They're craftsmen.

/THE END



A cigarette — at least this one I'm smoking — weighs about a sixth of an ounce. When it came out of the pack it was three-and-an-eighth inches long, including the filter.

I don't know much about the tree in the photograph except it's very tall, very heavy, and very old. And it's being felled by loggers for the Ben A. Thomas Company, a Union Oil account in southern Washington.

I do know the lumber from the fallen tree can become part of a house, of a chair, of a thousand useful and beautiful things made of wood. And that other trees will grow here, planted by the men who cut this one down.

Now, you try to set up a contest between the tree and that cigarette and there isn't a boxing commission in the country that'd let them in the same ring together. It'd be a plain out-and-out mismatch.

The cigarette would win every time -if it's handled by a careless smoker.

The unfortunate part is, when the cigarette wins, all is lost. The tree spent a hundred years growing to end as ugly ashes.

It wouldn't be a very popular contest, anyhow. Everybody'd be for the tree. Even in southern California where the local version of a tall pine is a bit of brush two feet high.

But like it or not, it's summer, people are on the move, and there'll be a lot of those mismatches staged here in the West. People cause nine out of 10 forest fires, with the careless smoker leading all the rest.

We don't have anything against cigarettes, pipes, cigars, campfires, outdoor barbecues, or, for that matter, fire itself.

What makes them murderously, devastatingly dangerous is the carelessness of people. People who won't use ashtrays, who flip cigarettes out car windows, who let the sparks fall where they may

where they may.

Be smart. Leave that kind of carelessness to the other guy. Do, and the trees will win — every time.

/THE END



The Sparkle Corps
is on the road
to lend a little woman-appeal
to station housekeeping

It's Summer and Sparkle tin



Marcia Meyers

Sparkle time again

On June 25, Union Oil's famous Sparkle Corps took to the road again for the fourth straight year. The purpose in 1962 is the same as it has been since 1959: to help dealers lend woman-appeal to their stations; to help them attract more business by running the cleanest, safest service stations in the West.

Marcia Meyers, above, is typical of the 15 young women who are driving the sparkling white cars this year. Marcia works out of San Francisco.

Like nearly half the girls, Marcia is a college senior. Those who aren't in school are teachers, with the exceptions of a housewife and an office worker. Marcia herself begins teaching elementary school after she's graduated from San Francisco State College.

For eight weeks, through the major part of the vacation season, she'll visit at least 12 stations a day.

Her job is to walk through, around, and about the station, looking at it as a customer would, and then giving it a rating. A hundred points is tops. (There's a bonus for a pleasant greeting and for asking for the gasoline fill.) Before the summer's over, Marcia will have given five to six hundred ratings — she visits many of the stations more than once, of course. All told, the Sparkle Girls will have made more than 20,000 inspections during the program's four years.

The program started June 25. But on Wednesday the twentieth, Marcia and the 14 other Sparkle Girls came to Union Oil Center in Los Angeles for three days of training. In addition to Marcia, the girls are: Judy A. Nakamura, Honolulu; Mary B. Bellande and Shirley Swannack, Washington; Joan A. Dieninger and Diane K. Smith, Oregon; Gloria M. Dixon, northern California; Barbara Keskeys and Regis A. Stevens, central California; Norma-Ree Naglich, Arizona; Carolyn Anne Holmes, San Diego; Mary A. Schoepe, Mary McLeod, Mary Ann Warnock, and Sally Zuber, southern California. An excerpt from their instruction book explains one reason for the Sparkle Corps' existence. It reads:

"Union Oil Company wants to present a quality image to its customers. This year, we'll spend a lot of money trying to enhance that image. It's essential that our advertising is truthful when we talk about courteous Minute Men, and clean stations and neat restrooms."

When the training was finished, it was back to the Divisions, into uniforms and white Sparkle cars, and out to give the stations a woman-customer's look.

We know from our market research that women influence about half of all gasoline purchases. And we know they're critical buyers, especially when they're traveling. They take — as any dealer will tell you — a very personal attitude toward the appearance of stations and restrooms and toward the attention they get when they drive in. That's why a preview — from the woman's viewpoint — by our Sparkle Girls such as Marcia Meyers is so important.

We know that by pleasing the ladies, our dealers are pleasing the most critical half of the family – and that the men will automatically be pleased.

THE END

BUSINESS HIGHLIGHTS

"CHEMICALLY PURE" FUEL FOR THE JET AGE

Jet planes span the United States in approximately five hours, flying above the weather in living-room comfort. Most passengers accept this marvel of engineering with never a thought of the many problems that had to be solved.

Take the fuel, for example. Today's big jets are powered with engines which can deliver 100,000 horsepower and burn fuel at an average rate of one ton every eight minutes — more during take-off, less when cruising. The fuel delivered into a plane's tanks is so clean it could be called "chemically pure."

During flight the fuel in a plane's tanks can reach temperatures as low as 40° F below zero. Therefore, the fuel must be very dry, otherwise ice crystals could form and cause the engine to malfunction. One drop of water in a barrel of fuel is too much!

There must be no tendency for the fuel itself to solidify because the formation of fuel crystals would also interfere with engine operation. The fuel must be free of any sediment. One grain of sand would be intolerable.

On the way from the fuel tank to the engine, jet fuel absorbs heat from the lubricating oil so the oil will not be subjected to excessively high temperatures. In performing this function the fuel must not change or break down to form resinous deposits harmful to the engine.

These requirements and others make necessary the continuing study of fuels by the Research Department. We have to satisfy the appetites of today's jets and also be ready for the 2000-mile-per-hour planes expected to be in commercial production in the future.

Because we live under a system of free enterprise, competition for the jet fuel market is keen. So Research must not only provide the ways for obtaining the desired characteristics but we must do it at the lowest possible price.

Research, from W. E. Bradley

"Chemically pure" 76 Turbine Fuel is filtered aboard a Western airliner.





Crude oil, finished products go through hundreds of miles of refinery pipelines.

Business Highlights-continued

SULFUR CAN BE A NUISANCE BUT IT'S ALSO A MONEY-MAKER FOR UNION OIL

The crude oil processed in our refineries contains sulfur chemically combined with the hydrocarbons. As a result of the catalytic cracking, thermal cracking and Unifining processes, much of the sulfur — undesirable in finished products — is recovered as a valuable by-product chemical.

For example, we remove sulfur from fuel gas produced by the catalytic and thermal cracking processes. Our patented Unifining process provides an economical means of removing sulfur from gasoline and mid-barrel products.

During 1962 we expect to recover approximately 310,000 pounds of sulfur a day at the Oleum, Santa Maria, and Los Angeles refineries.

Then: Collier Carbon and Chemical converts Union's waste hydrogen sulfide into high quality sulfuric acids, important additions to Collier's growing list of basic chemicals. The acid produced, for the most part, is being used in Collier's own operations for the manufacture of ammonium sulfate, a widely-used chemical fertilizer. Collier supplies Union Oil's requirements of sulfuric acid for use in the manufacture of high octane fuels; and also markets sulfuric acid to other industries.

THERE ARE MILES AND MILES OF PIPELINES IN OUR REFINERIES

The pipeline systems within our refineries add up to a several hundred mile transportation network.

The systems are both numerous and complex. They handle all raw materials (from crude oil to LPG) and finished products (from aviation gasoline to fuel oil).

Crude oil comes into the refineries by pipeline; most of our processingsteps involve pipeline movement. Finally, we deliver the finished product back to our own pipeline department for shipment to common carrier pipeline companies, or into tank ships, barges, tank cars, or trucks through more internal pipeline systems.

In addition to raw material and product pipelines, the distribution of most utilities used in the processing units — compressed air, water, steam, fuel gas and fuel oil — all require extensive pipeline systems.

Refining, from J. W. Towler

A CHANGE IN THE CHARACTER OF OUR CALIFORNIA FIELD OPERATIONS

The character of our exploration and production operations in California has changed over the past year or two. A large part of our attention is being directed to offshore rather than on-shore exploration; we are putting more emphasis on developing techniques for increasing production from existing on-shore wells rather than drilling new ones.

The change is the result of two factors: 1) in recent years, we — and the industry — haven't found any substantial new oil reserves in the State, at least in on-shore areas; and 2) there aren't as many drillable lo-

cations left in or near established fields.

At present, the areas off the coast seem to offer the best possibilities for the discovery of large new oil and gas reserves. An example is the 5,653 acres we recently acquired near Point Conception. A wildcat well test is scheduled for these lands later this year.

On the production side, we are expanding our secondary recovery activities in many of our older fields and initiating projects in others,

We are also getting more oil from our older fields by a wide variety of techniques. Among other things, we're developing ways of using our horsepower more efficiently in gaslift fields; we're raising more fluid by installing larger pumps or by using electric turbine pumps; and we are trying various chemical and mechanical methods to encourage a greater flow of oil from formations into well bores.

Field, from Ray A. Burke

"PRE-MIX" SALES UP

Southwest Mountain Division reports that summer is here. Service stations in the Salton Sea area serving boat enthusiasts, fishermen, and just plain pleasure seekers report that their normal gasoline sales volumes doubled during the month of April,

FROM HAWAII . . .

News from the State of Hawaii states that our Kaneohe consignee, Windward Petroleum Company, has completed negotiations to furnish 7600 gasoline, 76 Unifuel, and bunker fuel oil requirements of Castle Memorial Hospital for the next five years. This is the first hospital of major size to be constructed outside the Honolulu area on the island of Oahu. The first unit will accommodate 75 hospital beds. Building is financed by public subscription and will be operated by the Methodist Church.

Marketing, from C. E. Rathbone

A MAN CAN CRAWL INSIDE THE BIGGEST "76" SIGNS. THEY'RE AT DODGER STADIUM

The twelve-foot six-inch diameter 76-Union" signs above the score-boards at the Dodger Stadium are the largest plastic signs ever built for our use, and at over one hundred feet above the field are probably the highest ever installed. Their large diameter requires special internal bracing to support their weight of one thousand six hundred and seventy-five pounds and the expected wind loads.

The signs were designed to provide adequate light, but not to interfere with the scoreboard's readability. They are internally illuminated by twenty-six fluorescent lamps on ten-inch centers midway between

the double faces.

Access to the signs was a primary concern; so hatches were designed to permit a maintenance man to enter the sign itself to clean the interiors and replace lamps. A retractable boom on the top of the sign supports a bosun chair for cleaning the exterior faces. Any volunteers for this job?

The Advertising Department requested two eight-foot diameter translucent plastic balls with our "76" trade-mark for installation atop the Sky Ride Terminals at Century 21, Seattle World's Fair. These were required to have interior illumination over the entire surface area, and to rotate without visible mechanism.

Practically no information was available on this type of work; it was heretofore untried in commercial applications. However, Electrical Products Consolidated, of Seattle, was successful in constructing the spheres in two sections with a fluorescent lighting core and inside rotating mechanism. The results are outstanding, and all visitors to the World's Fair will have a spectacular view of "The Sign of the 76."

Purchasing, from C. S. Perkins





On the sidewalk of f

An odd thing about Pagie Lake is that no one seems to know where the lake is. From the air, this wilderness of Louisiana marsh, unpeopled except for a Union Oil field camp sprouting right in the middle, hold's a thousand small pools of water. Two of them are

large enough to be called lakes on the navigational chart Pilot Jean LeBlanc hands you in the cockpit of his Widgeon airplane. But both are some distance from the camp and neither is named Pagie.

Right now the marsh is criss-crossed by a series of straight canals — the longest of which seems too short and narrow even for a Widgeon's landing. Jean assures you there's nothing to worry about. He adds: the area seethes with snakes.

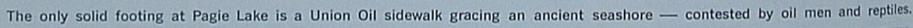
At Pagie Lake camp, as you wriggle out of the amphibious airplane's sea-going exit hatch, a mud bank with topping of coarse grass looms in front. You examine the grass for anything coiled, moving or sinister. Then in three or four bounds you're across no-man's-land and atop the most welcome refinement in a hundred miles—a new concrete sidewalk. It's nearly white, nearly wide enough, and nearly a mere four inches above the deadly snake pits on both sides. You notice that everybody cleaves to the middle and walks with eyes cast down.

Everybody, that is, except the construction crew. These Cajuns, who speak a heavily accented mixture of half-French and half-English, seem to have a perfect fearlessness or understanding of snakes. It's been said they'll kick a reptile to one side rather than bother to dispatch it. Right now they're building a series of padded bottoms for field tanks to handle the liquid production from this important new Union gas field. Their careless abandon as they venture off the sidewalk makes you wonder if Jean exaggerated slightly.

Still you waste no time and no upward glances getting to camp headquarters, about a hundred yards forward and three to the left. Here the big front porch is screened against all sizes of swamp killers ranging from vipers down to mosquitoes.

Over cups of dark-roast coffee, strong enough to curl an out-of-stater's hair, the conversation soon turns from "Welcome to Pagie Lake! — How's the stock market reacting?" to oil field problems of production and transportation:

Pagie Lake, you're aware, is one of Union Oil's newest, and hopefully biggest, petroleum discoveries in Louisiana. About a dozen wells have been drilled in the liquid terrain, all of them excellent producers of natural gas and condensate. Each step-out well has added to the field's dimensions or penetrated additional producing sands. It's an hour's boat ride from camp to a well now





Pagie Lake

drilling near the field's latest perimeter.

A problem of transportation to this distant portion of the field engages two of the young engineers as you listen. For your benefit they explain:

"See where the sidewalk goes to that boat landing just beyond those trees? It's only a hundred yards or so, but it takes just 141/2 hours to get on this side by boat.

"Why don't we just dig the canal right on through that bank of mud? Woo Hoo! Would the government be on our necks! You see, that chunk of high ground was once the shoreline of the open Gulf. Salty waves washed up one side of it, while on the opposite side was a calm. fairly fresh-water bayou. You can see a remnant of the bayou just back of camp. They called it Bayou Mauvais Bois, which means bad woods. That's a good name for it; it's stagnant and full of snakes.

"Well, even though the sea has retreated a few miles south, the old shell ridge remains a barrier between brackish marsh water and the salt. Louisiana would rather secede to Texas than allow a break in that barrier. So, our best transportation solution is a duplicate set of work boats to handle both sides of the reef.

You've been at Pagie 30 minutes - heard snakes mentioned a dozen times — haven't seen one. "What's a water moccasin look like?"

The engineers immediately empty their coffee cups and lead the way down that remaining dog-leg of concrete sidewalk. "Look," they say, pointing to several bath-tub sized pools of muddy water less than 10 feet away. The pools waver with activity and you soon notice five or six small reptiles in each. All are disappointingly tiny and as playful as pups.

"It's the wrong time of day," the engineers apologize. "These are just juvenile delinquents. Their mamas and papas are taking it easy out there in the shade."

"Hey, Joe," one of your escorts suddenly calls to a nearby Cajun, "seen any good-sized moccasins today?"

"Yeah," Joe answers as casually as a clerk in a shoe

store. "Right over here. Follow me."

You half dread to leave the sidewalk and follow bold footsteps through the jungle of clods and weeds. But walking more with your eyes than your feet you follow Joe to a halt and sight along his extended right arm to the first adult cottonmouth you've ever seen. The snake's black, thick and ugly - stretching out at least four feet along the margin of his private swimming pool. If he sees you, he doesn't seem inclined to move away. Even when



The moccasin opened wide to defend his private pool or offer a cottonmouth pose for the photographer.

Joe heaves a clod, the moccasin stands his ground, striking several times at the intruding missile, then glaring right at you over his wide-open mouth.

Back on the sidewalk of Pagie Lake, you confide to Joe and the engineers that it's great to be back on solid footing - and alive. They warn you not to feel too safe and satisfied.

It so happens, they explain, that concrete gets nice and warm under the Louisiana sun and retains some warmth throughout the night. So when the sun goes down or behind a storm front, the snakes come out and languish full-length on the nice belly-warmer Union Oil has so thoughtfully provided. The harmless water snakes exercise a degree of courtesy to let pedestrians walk by. Not so the moccasins; they hog the walk and resent being molested with all the venom in their souls.

As you wriggle back into the Widgeon and take off with Pilot Jean LeBlanc, Pagie Lake seems bigger and more important than when you came. You notice well platforms along each of the straight canals. You see a drilling derrick busy finishing another hole. You wonder how this gas field will look 10 years hence, And you smile a little to think of the camp's first civilizing step a sidewalk perfectly designed for boots - and moccasins.

THE END



American Industry—continued

mankind. Furthermore, our economic strength undergirded by America's industry stands as a sturdy bulwark against communist efforts to replace "capitalism" with a "communist Utopia."

It is only natural then that the communists direct so much energy in seeking to destroy this Nation's industrial might. In pursuing this aim, the Communist Party, USA — an integral arm of the international conspiracy — takes its cue from the tenets of Marxism-Leninism. As such, its strategy and tactics are many and varied. Deceitful propaganda, infiltration, outright lies — all are favorite measures resorted to by these determined conspirators. Obviously, their methods need not conform to our code of morality and ethics — to them anything which promotes communism is thereby moral.

Let us look for a moment at some of the propaganda techniques they so cleverly wield. With a great pretense of humanitarianism, communists claim that they constantly strive for the interests of the workingman. "Higher wages," "shorter working hours" and "full employment" are among the worthwhile slogans which they flaunt before the public. But what are the real goals behind the communists' use of these noble-sounding phrases? None other than the fomenting of bitterness, confusion and dissension between employee and employer! The communists work fanatically to "sharpen the struggle between labor and capital." They are most unhappy when the various groups in our economic sector work out their problems in a spirit of cooperation.

Infiltration is also one of the prime tactics of the communists. They fully recognize the value of placing their members secretly in various organizations, such as labor unions and other economic groups. Gus Hall, leader of the Party in this country, has instructed his fellow comrades that they must establish and maintain close ties with the "proletariat." What better way to spread the Marxist-Leninist "good news" and to educate the working class as to where its "true interests" lie!

Hall is also quick to include advice from Lenin that

Party members should "learn to penetrate into prohibited premises where the representatives of the bourgeoisie exercise influence over the workers." His admonition clearly reveals that no area of our industrial life is immune from the attempts of the communists to gain inroads.

I would like to emphasize here that the overwhelming majority of economic groups in this Nation have repelled the attempts of the communists to gain influence. The economic sector of our society, I feel, has combated with vigor and determination the efforts of communism to spread its poisonous venom. It is most important, however, that every employee and employer remain alert to the ever-continuing attacks by these conspirators. We must never allow the communists to in any way sap the strength of this vital segment of our national life.

One of the most acute dangers posed by communism is the role played by Soviet and satellite espionage operations. The agents of the countries behind the Iron Curtain are busy day and night seeking to steal this Nation's secrets. Industry here again obviously presents a prime target. In fact, the Soviet block has built up over the years what one Russian official described as the best industrial spying system in the world.

The intelligence networks of the Iron Curtain countries are most versatile and subtle in carrying out their nefarious mission. In many cases officials of Soviet and satellite countries assigned in the United States serve as espionage agents. In one instance an Assistant Soviet Military Attache maintained contact with a sales engineer in this country for almost a year. His purpose? He was seeking the cooperation of the engineer in obtaining information on jet fuel, guided missiles and atomic submarines. The Russian promised the American large sums of money for his efforts — then failed to fulfill his promise.

Entrapment, blackmail and threats are also among the devices used by Soviet and Satellite agents to recruit Americans to obtain information. On one occasion Russians threatened a naturalized American citizen that a relative then in the Soviet Union would suffer reprisals unless the American furnished them technical and industrial information. In some cases Americans have allowed themselves to be compromised and have tragically betrayed their own country rather than risk exposure.

In addition to obtaining secrets in stealth, Soviet representatives exploit public information available on industrial techniques and products. Correspondence with industrial firms and chambers of commerce, subscriptions to technical publications and attendance at conventions are all utilized by these intelligence agents. In a recent year, Soviet officials alone attended some thirty conventions covering such fields as aeronautics, electronics, plastics development and others. At one such meeting two Russians began diligently to gather literature. By

the time they had finished their collecting activities, they had picked up some 250 pounds of material.

The menace posed by the subversive activities of the Communist Party, USA, and the espionage operations of the Soviet bloc is a matter of urgent concern to every American. To you who are a part of an industry so vital to our national life the stakes are indeed high. What then can you do to thwart the forces which would undermine this Nation's security?

Knowledge about communism is first of all highly important. Only by being informed of the true nature and tactics of the communist conspiracy can we effectively combat it. Take the time to read about what communism actually means to those who are under its heavy yoke. Be able to contrast the brutal realities of life in Iron Curtain countries with the freedoms we know under a democratic system.

Be aware that your industry represents a definite objective for the spying system of Soviet and satellite nations. Research projects and new techniques are of particular interest to the intelligence agents of these countries. Extreme care should be exercised in protecting data on vital programs or procedures — data which if it should fall into the wrong hands could be of great detriment to our national defense.

Any information pertaining to possible espionage, sabotage or subversive activities should be promptly reported to the FBI. The FBI is charged by law with protecting the internal security of the United States. Remember never to make your own private investigations, Indiscriminate discussion of apparent subversive activities should be avoided as it might well jeopardize investigations being conducted by the FBI. In the interest of national defense, the FBI often finds it more feasible to identify spy network members, contacts and methods rather than to make immediate arrests.

The American tradition of cooperation and citizen responsibility is a dynamic weapon in protecting our security. The fight against the deadly forces of communism demands the utmost determination by each of us to fervently uphold the democratic ideals underlying our Nation's greatness. In a spirit of mutual dedication we can preserve our heritage of freedom and justice for all.

/THE END



UNIVERSITY OF GUADALAJARA STUDENTS and their professors from Mexico visited Los
Angeles Refinery recently as guests
of the City of Downey, their "Sister
City." Downey, whose mayor is
Union Oiler Scott E. Temple, was
the first U. S. city to extend this
gesture of friendship across the
border to a Mexican city. A great
deal of goodwill and understanding was generated through the exchange of introductions.

from T. H. Gaines

HE'S WORN OUT THREE STA-TIONS! Clarence (Spec) Sturges and Sales Manager D. A. Russell seem reasonably happy about something. Spec has a good reason; he's retiring after 34 years as a Union Oil dealer in Sacramento. During his long association with the Company, Spec wore out three stations at the same location on Del Paso Blvd.



EMPLOYEES

July, 1962

45	YE	ARS

CLARENCE R. HAND.........Mktg., Calif. No. Cstal.

40 YEARS

EARL L. ANDREWS......Field-Pac. Coast, No. JOHN G. KILIAN Field-Pac. Coast, So.

35 YEARS

JOHN R. BEESON L. A. Refinery W. L. WINSCHELL L. A. Refinery

30 YEARS

RAYMOND C. COOK......L. A. Refinery ROBERT R. ENNES......L. A. Refinery HOMER C. JOHNSON.......Field-Pac. Coast, No. MICHAEL J. WARD......Glacier Div.

25 YEARS

JOHN C. DEJONGMktg., N.W. Div. M. B. GRANVILLE Mktg., Calif. So. Cstal. JOHN C. HAZZARD......Foreign Operations ORVILLE P. HILTON......Compt.., Systems WILLIAM C. NERO. Unoco Trading Co., Hong Kong

20 YEARS

DONALD M. CHAFFEEL. A. Refinery M. A. DE FIGUEIREDO. Oleum Refinery CARL M. ERICKSEN. Mktg., N. W. Div. MARGARET L. FISHER. Compt., Mktg., Accts. Oper. CHARLES M. GIBBS.......Field-Pac. Coast, So. JOSEPH L. HODGSON......Glacier Div. GENNIE P. HOLMES......Research CHESTER G. MILLER.....Glacier Div. S. L. SCHIFSKY.......Mktg., N. W. Div. H. F. WILKINSON......Research

15 YEARS

WALTER D. CONKLIN Mktg., Calif. Central Div. MABEL B. GARRITY. Oleum Refinery PHILIP W. SMITH. Mktg., Calif. So. Cstal. LOUIS G. TIEMANN......Mktg., Calif. Central Div.

10 YEARS

FRANKLIN S. BOCCIA.....L. A. Refinery HELEN ROSE BUSOLD. Compt., Mktg., Accts. Oper. GEORGE R. CHEYNEYField-Central Div. ROBERT S. COOKE Field-Central Div. EDYTHE JANE

DAVIES.....Compt., Mktg., Accts. Oper. GEORGE F. FISHER....Exploration-Pac, Coast, Land HOWARD A. JOHNSON....Compt.-Refining Accts. ROBERT E. KINNEARField-Pac. Coast, No. RAYMOND R. KUZILA.....Pipeline-So. Div. HAROLD M. LIANField-Alaska Div. FAWCETT MAYFIELD. E. W. MEADOWS, JR Compt. - P.&T., Pac. Coast

NAKASHIMA......Compt., Mktg., Accts. Oper. H. L. PETERS......Mktg., Oregon Div. LARRY RANSDELL.......Mktg., Calif. So. Cstal. GERALD L. SMITH......Mktg., Calif. So. Cstal. ALBERT C. TARR.....L. A. Refinery R. R. TEMPLE, JR.....Exploration-Santa Paula M. C. VANDEMORE......Compt., P.&T., Crude Oil E. F. VANEECHOUTE......Compt., Corp. Accts. MARGARET I. YOUNG.....Exploration-Land

August, 1962

45 YEARS

WILLIAM MERCERPipeline-No. Div.



40 YEARS

HAROLD L. ALT......Oleum Refinery

35 YEARS

ALFRED ALEXANDER......Oleum Refinery LEO F. ANDERSON......Pipeline-No. Div. WILLIAM A. CHAMPLIN Comptr., Auditing-Mktg. CARL A. STEINER Field-Pac. Coast, No. CASPER J. WEIR, JR.....Pipeline-No. Div. LLOYD M. WILLIAMS.....Oleum Refinery

30 YEARS

ROBERT F. NIVEN.....Secretary's

25 YEARS

THIEL D. COLLETT......Public Relations WILLIAM A. KARBERG.....Research FRANK KILMINSTER.....Santa Maria Refinery JOHN T. KING......Mktg., N. W. Div. H. R. McLAURIN......Comptr., Central Div. FRANCIS H. MOORE......Comptr., P.&T. Staff ETHAN R. SCHMIDT......Research GEORGE O. SMITH, JR Mktg., S. W. Mtn. Div.

20 YEARS

ONEAL COPELL Field-Gulf Div. PLINIO E. GNESA......Field-Pac. Coast, No. ANNETTE F. MONAHON......Executive DONALD G. PROBST......Oleum Refinery WILBERTA WOODMktg., Calif. So. Cstal. 15 YEARS VIRGIL L. BATEMAN.....L. A. Refinery JOHN G. CAMERON.....L. A. Refinery JEWELL R. CASE......Communications HADYN E. CROFTS.....Field-Pac. Coast, No. QUENTIN F. CRON.....L. A. Refinery STANLEY DURHAM......L. A. Refinery LEO B. HAMMON.....L. A. Refinery HARRIS B. HANSON.....L. A. Refinery RALPH M. HITCHCOCKField-Pac. Coast, So. FLORENCE L. HACKSON

Comptr., Mktg. Accts. Oper. LAURA A. JEFFERY...... Field-Pac, Coast, No. ELDRIDGE B. JONES......L. A. Refinery FRANCIS H. KAUN Mktg., Export & Ref. Blk. Sales JAMES L. MASON......L. A. Refinery WILLIAM RIALE.....Mktg., Calif. So. Cstal. ARCHIE M. WALSETH Mktg., Calif. So. Cstal. ARTHUR WEBERMktg., Oregon Div. 10 YEARS

WILLIAM J. BARAL Research MARY L. BERNTSENResearch

T. E. BIGGERTMktg., S. W. Mtn. Div. RUPERT L. BUCKALEWL. A. Refinery J. L. CAMPAGNE Mktg., Calif. So. Cstal. HARRY D. CLEARWATER....Mktg., Calif. So. Cstal. FRANK L. CONSTANT.....Field-Central Div.

CLAUDE V. GISTELLI L. A. Refinery
CHARLES H GUDDEN Cleum Refiner
WAYNE E CROOM
JACK F. HARRAHL. A. Refinery
JACK F. HARRAH
Comment
JOHN H. JOHNSON L. A. Refinery
CAROLE J. HIDKING A. Refinery
HOWARD NANCE ID
HOWARD NANCE, JR. Mktg., N. W. Div. JEROME L. NORTH Field-Gulf Div. MARTIN G. OLSON IP Research
MARTIN G OLSON IN Research
MARTIN G. OLSON, JR. L. A. Refinery
BERTON S. SARIS L. A. Refinery JAMES V. SHANTZ L. A. Refinery
WILLIAM L. SHUMATE Plant N. W. Div.

WILLIAM L. SHUMATE......Pipeline No. Div.

LEWIS J. WALLIS L. A. Refinery
CLYDE S. WILLIAMS L. A. Refinery
DONALD L. WYMORE Research

DEALERS

July, 1962

EUGENE E. FINNELL

40 YEARS

CHARLES LAWRENCE......Long Beach, California ROBERT TAYLOR Long Beach, California

30 YEARS

HAROLD COOPER.....Auburn, Washington

25 YEARS

W. W. ALLEN......Oakridge, Oregon SCOTT YOUNG......Idanha, Oregon

20 YEARS

E. TANSKEY.....Los Angeles, California

15 YEARS

MOTOR COMPANY.....Lewistown, Montana W. R. ERWIN.....San Pablo, California F. L. & R. G. KROUSKOP......Kittitas, Washington

10 YEARS

KEN AIKEN......Paramount, California
MYRTLE BAIN......Packwood, Washington BLUE RIVER AUTOMOTIVE

& MACHINE CO......Blue River, Oregon JIM ELKINS dba McFARLAND TIRE

& RADIATOR SHOP......McFarland, California C. H. & D. E. HALLOCK......Gilbert, Arizona E. WHITE Sekui, Washington

5 YEARS

JAY W. ANDERSON......San Jose, California GLENN APPLONIE......Salt Lake City, Utah HARRY E. BRYAN.....San Jacinto, California JOHN BRYNELL Riverside, California JOSEPH EPPERSON dba

EPPERSON'S MARKET.....Biola, California HALS MOTOR CLINICSeattle, Washington NEIL O. HART Roseburg, Oregon
CARL HOLTE San Francisco, California JACK JENKINS......North Pole, Alaska BUREN C. KENNEDY Medford, Oregon TAICHI KIMURA.....Honolulu, Hawaii MANUEL A. LEMA.....Ferndale, California JUDD K. McALEERLongview, Washington OTO'S AUTOMOTIVE

SERVICE San Mateo, California JAMES ROCHE......Westwood, California SHIPAULOVI TRAD, POST....Second Mesa, Arizona ROBERT E. WHITE......San Rafael, California

August, 1962	August, 1962		TRELLA B. GARMAN	
35 YEARS	10 YEARS		Southern Field	Feb. 2, 1924
CARL E. COMPTONEureka, California	C. W. LINDELL COMPANYJa	cksonville, Florida	MARLIN GRAMSE Marketing—Oregon Div.	June 19, 1934
30 YEARS H. N. ABELSEN	NORTH CAROLINA EQUIPMENT	ich No CII-	HARRY D. HALL Southern Field	Nov. 28, 1921
CRAIG BELL North Hollywood, California	SHAWNEE MOTOR SUPPLYSh	awnee, Oklahoma	WALLACE J. HONEYCUTT Southern Field	July 10, 1922
L. C. & G. R. WADEClear Lake, Washington	RETIREMENTS		JACK C. IVY Los Angeles Refinery	Oct. 5, 1920
K. E. STRICKLANDIndio, California	June 1, 1962	Service Date	SAM JENSEN Northern Field LEROY E. JONES	June 30, 1935
20 YEARS MRS. GRACE MANTSCHEWSKYWestport, Wash.	CHARLES H. ALLAIRE Southern Field	April 18, 1923	Southern Field LILLIAN KEESE	Nov. 15, 1922
15 YEARS	JESSE BOURQUE Field—Gulf Division	Feb. 17, 1944	Research JOHN R. KIMBERLY	Sept. 29, 1943
W. K. BOLL Grand Coulee, Washington CARL G. CLARK dba CLARK'S GARAGE	WILLIAM P. BRADEEN Los Angeles Refinery		Marketing—Oregon Division FRANK G. KROENIG	June 1, 1933
Fresno, California CHAS. H. CYRHoquiam, Washington	ROBERT L. BRAND Northern Pipeline	Feb. 2, 1926	Los Angeles Refinery	July 1, 1935
EVERSHAM GROCERYLa Push, Washington A. J. HAMMITTCheshire, Oregon	FRANK CROOKES	May 22, 1945	LESLIE LARSEN Marketing—Northwest Divisio	n July 9, 1924
GEORGE MOEN	Oleum Refinery LEE M. DAVIS	Feb. 14, 1938	STEWART LEIGHTON Oleum Refinery	June 21, 1929
BOB SIMMONSHawthorne, California	Southern Field WILLIAM S. EGGLESTON	March 9, 1922	THOMAS J. MORASH Southern Field	Sept. 3, 1933
10 YEARS R. J. BRENCEBozeman, Montana	Executive EDWARD C. FISHER	August 16, 1926	JENS L. OLSON Southern Field	March 30, 1925
ROLAND HUNDLEYForest Grove, Oregon JOHN LESTERBakersfield, California	Northern Field DARWIN I. GANTZ	April 27, 1923	EDWARD J. QUINN Oleum Refinery	Sept. 16, 1945
J. HOMER SMITHElkton, Oregon	Los Angeles Refinery FRED M. GEDDES	Sept. 3, 1935	WALTER C. ROHNING Southern Field	April 9, 1923
5 YEARS	Southern Field HARRY G. HAMMER	May 10, 1923	FRED S. READER Marketing—Oregon Division	April 13, 1936
SHELBY ALBRIGHTRedondo Beach, California VERN ANONDSONMonterey Park, California	Los Angeles Refinery FRANK C. HANSEN	Sept. 16, 1929	SALVATORE STEA Southern Field	Sept. 6, 1929
MARTIN DAILEY Reedsport, Oregon DINUBA AUTO & TRUCK TERMINAL NO. 2	Comptroller's-H. O.	August 16, 1926	LLOYD M. WILLIAMS Oleum Refinery	Aug. 8, 1927
Dinuba, California ELBERT HAIL San Luis Obispo, California BRENT HILLOCK Big Pine, California	Purchasing—H. O.	Feb. 15, 1943	WESLEY H. WINTERS Marketing—Oregon Div.	Feb. 2, 1934
WALTER A. JOHNSONLos Angeles, California W. E. MOSKALReno, Nevada	CLAIR E. LEONARD Oleum Refinery	May 2, 1934		
MARIO PERCINI Aberdeen, Washington DAVID SCHICK Pasadena, California	EARLE F. MOFFITT Marketing—Calif. So. Coastal	March 9, 1929	IN MEMORIAM Employees:	
BERT SINNOTT	GLENN S. MURRAY Southern Field	August 31, 1942	ALBERT J. CLAUSEN	t 0 1042
WM. K. TODDSilverton, Oregon	JOHN L. ROBERTSON Los Angeles Refinery	Dec. 8, 1923	Oleum Refinery STANLEY A. HOWES	June 9, 1962
ART WOOTTONLos Angeles, California	TED SLUDER	May 7, 1934	Mktg.—Calif. No. Cstl. Div. WILLARD D. ROBBINS	May 3, 1962
CONSIGNEES - DISTRIBUTORS	Los Angeles Refinery RAYMOND C. TOBIN	July 6, 1927	Mktg.—So. W. Mtn. Div. CHARLES A. SCHILLIN	May 30, 1962
June, 1962	Los Angeles Refinery ANNIS C. TULLY		Exploration & Production REESE H. TAYLOR	May 14, 1962
10 YEARS	Purchasing—H.O. EDWARD O. WALTERS	Sept. 7, 1938	Executive, Home Office	June 22, 1962
ALLIED CORPORATIONTyler, Texas	Northern Field BENJAMIN A. WOODFORD	August 20, 1936	Retirees: PATRICK DIAMOND	W 17 1040
OIL COMPANY	Marketing—Admin. Services	Sept. 26, 1918	Oleum Refinery HAROLD R. FISHER	May 17, 1962
5 YEARS	July 1, 1962	Service Date	Mktg.—Calif. No. Cstl. Div. CHARLES F. GODFREY	May 3, 1962
PARTS COGettysburg, Pennsylvania	FRED C. BARR, JR. Marketing—Calif. No. Coastal	June 23, 1921	Exploration & Production EARNEST C. MAY	June 5, 1962
July, 1962	FLORIAN E. BRUSSEAU Marketing—Oregon Div.	Feb. 22 1945	Los Angeles Refinery WILLIAM J. McINTIRE	June 9, 1962
35 YEARS	CLIFFORD COATES Los Angeles Refinery	May 21, 1945	Los Angeles Refinery ROYSE B. SCHERICH	June 23, 1962
G. I. INMANVancouver, Washington 15 YEARS	GEORGE J. CULP Oleum Refinery	March 11, 1926	Oleum Refinery ERNEST J. SMITH	May 7, 1962
VERYL F. BOMMER Blythe, California L. E. RUSSELL Oakdale, California	ELWOOD DOWNS Northern Field	July 1, 1936	No. Div. Pipeline MORRIS S. SUTPHEN	June 22, 1962
10 YEARS	EARL W. FORBES Los Angeles Refinery	July 12, 1944	So. Div. Field REID TAYLOR	May 19, 1962
PARTS, INCHickory, North Carolina	DORWIN F. FULLINGTON Oleum Refinery	May 8, 1944	Oleum Refinery	May 8, 1962



Where We Work...

Often oil is found in the unlikeliest places — under deserts, muskeg, sea bottoms, cities. Now we've struck it — natural gas, that is — under snake-infested Pagie Lake in Louisiana. The work imposes a few new problems, but the crew has set up housekeeping — right in the snake pit. (See story on page 6.)