

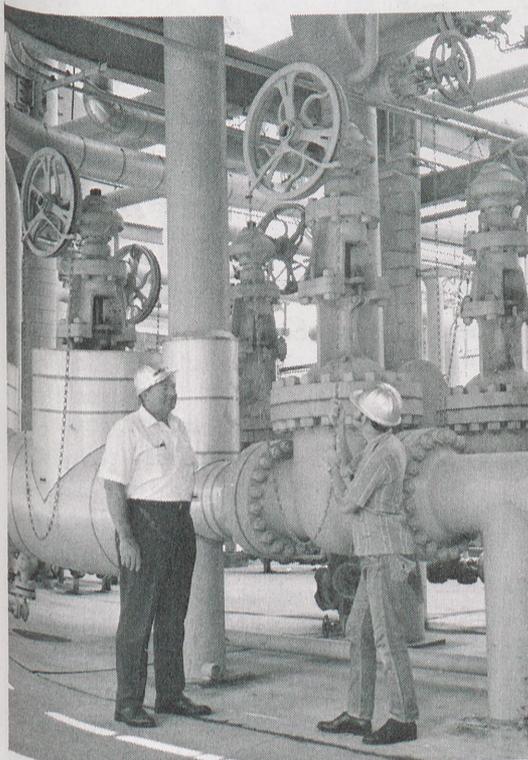
# Shellegraph

Houston Refinery

No. 27

Friday, July 23, 1971

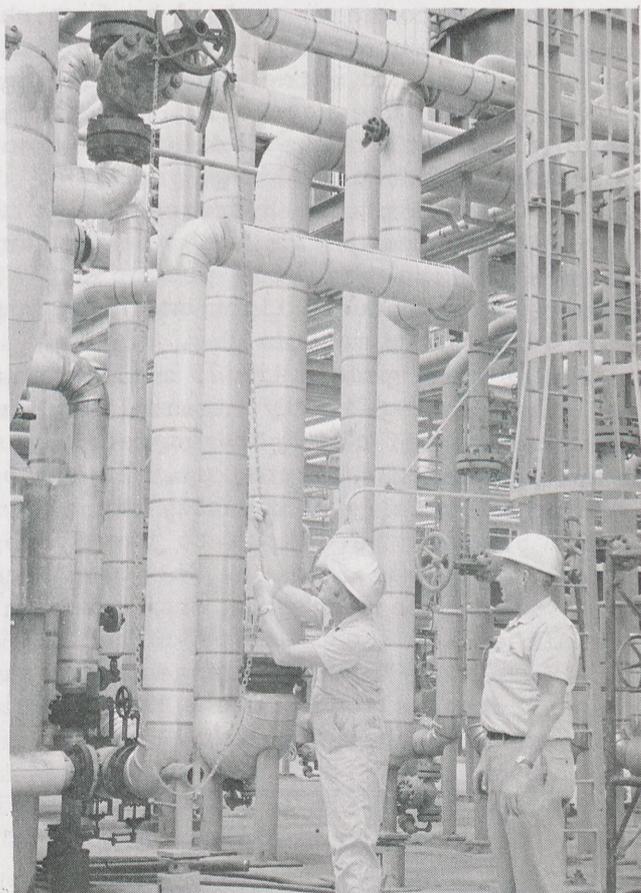
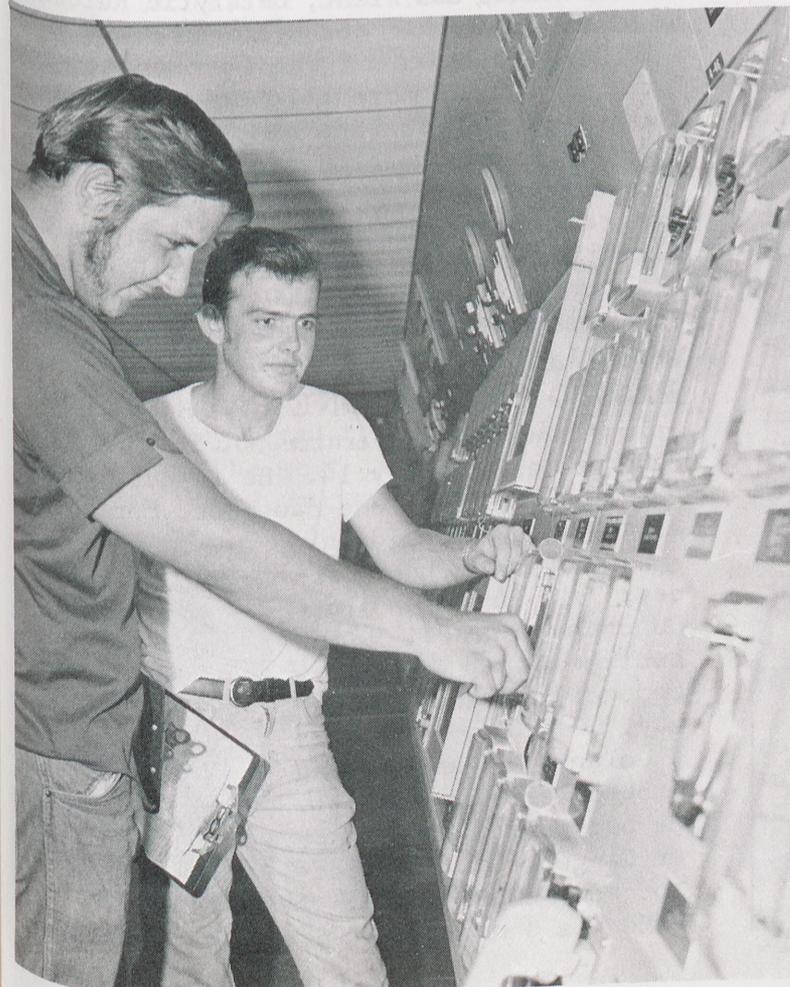
## HYDROCRACKER STARTUP COMPLETES \$100 MILLION EXPANSION PROGRAM



With D. D. Williams, Operator #1, as he closes a bypass valve around recycle gas dryer, is Lonnie Grounds, Operations Supervisor.

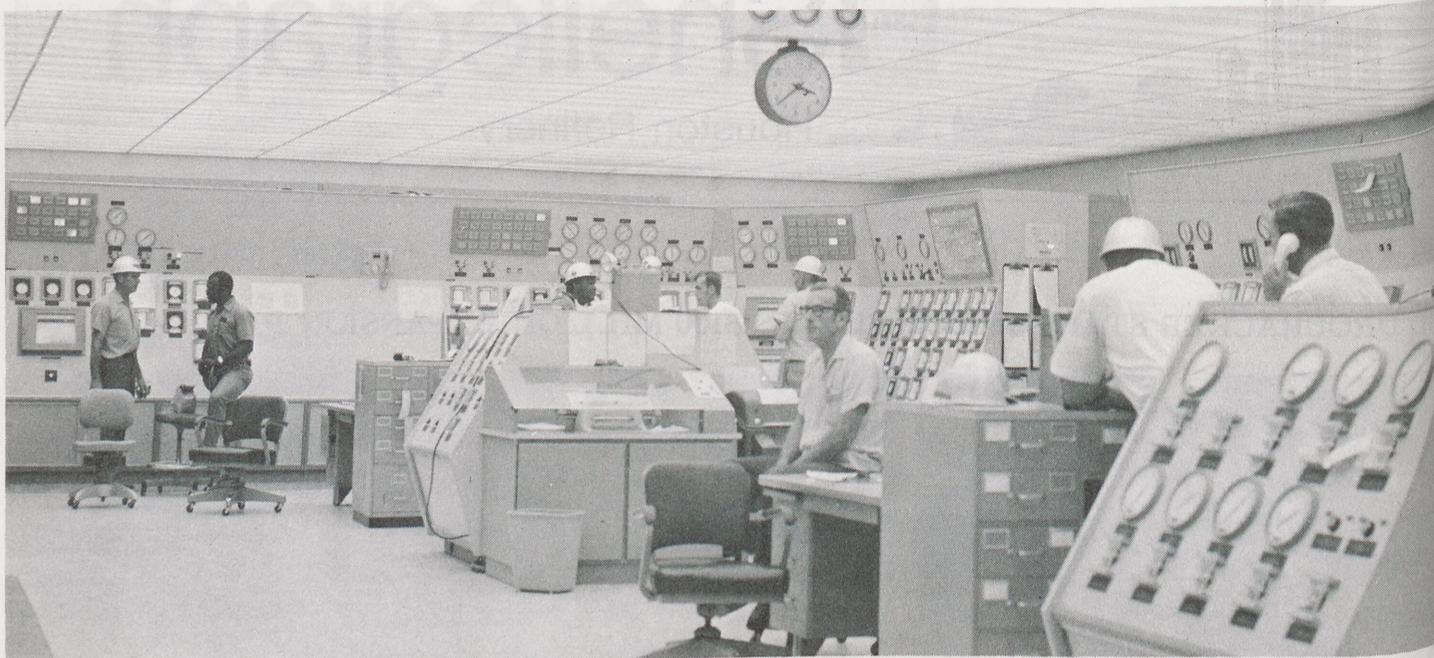


Operator #1 Morris Scales is putting recovered vent gases from Fuel/Flare Header to the Refinery fuel gas system. See story on Page 2.



Left, A. J. Jalufka and C. E. "Red" Nelson, Operators #1, adjust hydrogen flow rate to the Hydrocracker. Above, W. B. May, Shift Foreman, watches N. G. Choate, Operator #1, closing startup bypass valve.

## HYDROCRACKER STARTS UP SMOOTHLY AFTER MONTHS OF PREPARATION (Continued from Page 1.)



This central building houses controls for the four plants in the Hydroprocessing Department.

The new 25,000 barrel-a-day Hydrocracker went on stream June 22 without a hitch after months of preparation, completing the Refinery's \$100 million expansion program.

Operators, who had received training in a special school last fall, cut feed to the first stage of the Hydrocracker on June 19, and to the second stage on June 22, thereby bringing the unit officially on stream.

About two months of preparation led up to the successful startup. "The main thing that should be stressed," said Lonnie Grounds, "is the magnitude of the preparatory work. Sixteen operators, supervised by four shift foremen, pressure tested and washed lines, tested pumps, and witnessed the loading of catalyst into the reactors. The men made doubly sure that the Hydrocracker would operate at the design high pressure. The unique feature of the Hydrocracker is that 25,000 b/d of gas oil feed are converted entirely into gasoline products." The Hydrocracker produces light and heavy naphthas and lighter materials.

Earlier this spring, the 75 million standard cubic feet-a-day Hydrogen plant, which provides one of the hydrogen feeds to the Hydrocracker, was started up. It has been running essentially at capacity since April.

The primary feedstock to the Hydrogen plant is dry gas from the Sats Gas Plant. This stream plus vent gases from other units are mixed with steam and processed to make 75 MMCFD of 97% pure hydrogen. In turn, the hydrogen is fed into the Hydrocracker, OPII, and Hydrodesulfurizer No. 2.

### SHELLEGRAPH

Published by Shell Oil Company for its Houston Refinery and Houston Research employees at Deer Park, Texas.

Mrs. Josie Ochoa--Editor

Environmental protection was a design factor in the Hydrocracker complex. A feed gas treater on the Hydrogen plant removes hydrogen sulfide from the feed stream before the resulting product hydrogen is fed to the Hydrocracker. This step is required to protect the Hydrogen Plant catalyst. The hydrogen sulfide is recovered and routed to Shell Chemical for sulfur recovery. A smokeless flare system on the East property, which serves Hydrocracking, Cat. Cracking and Aromatics, has a unique design which provides for recovery of vent gases from the Hydrocracking complex. These gases are then diverted to the Refinery fuel gas system.

A central building houses controls for the Saturates Gas Plant, Catalytic Reformer No. 3, Hydrocracker and Hydrogen Plant.

With completion of the four units, the Refinery is now more able to meet demands for nonleaded gasoline and to supply more feedstocks to Shell Chemical.

Previously completed phases of the expansion program included a 160,000 b/d crude oil distillation unit (DU2), a utilities control center (UCC), a 138,000 volt substation, and several pollution abatement units.

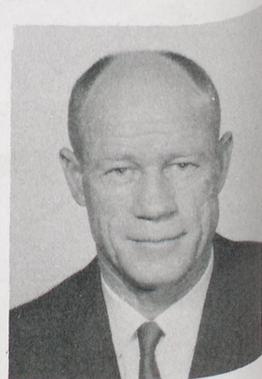
### J. DELANEY, OPERATOR, LUBE OILS, PASSED AWAY WEDNESDAY, JULY 14

J. Delaney, Jr., Operator No. 1, Lube Oils, died Wednesday, July 14. He is survived by his widow, Dimple, one daughter, three sons and seven grandchildren.

Services were held Friday, July 16, at 2 p.m., Colonial Funeral Home. Burial was at Grandview Cemetery, Spencer Highway.

Delaney began working at the Refinery in 1941. He had served as a Pumper Gauger, Cargo Inspector and Pumper No. 1.

He was a native of Corsicana, Texas.



**2-Year Research Program  
STUDY FINDS SANTA BARBARA SPILL  
DID LITTLE ECOLOGICAL DAMAGE**

Oil spilled into the sea in the Santa Barbara Channel in 1969 did little ecological damage, a two-year survey of the area has shown.

The research investigation of Union Oil Company's well blowout and resultant spill was done by a team from the University of Southern California's Allan Hancock Foundation.

Funded by a \$240,000 grant from the Western Oil and Gas Assn., the foundation's team of scientists studies the biological effects of oil pollution and the physical, chemical and geological changes caused by the spill.

The 900-page report, in two volumes, reported that damage to marine life was "much less than predicted" and that "the area is recovering well."

The report downgraded earlier speculation that the massive oil spill had permanently damaged the beach and ocean environment of the channel.

Even the presence of oil on the breeding grounds of sea lions and sea elephants at San Miguel Island had little effect on the species. Deaths of migrating whales have not been higher than formerly. In an autopsy of one dead whale no trace of oil was found.

Oil deposited on the beaches was subsequently covered with sand, and was scoured away into deep water by wave erosion.

The most damaging changes to the channel were due to the urbanization of the land rather than the oil blowout.

The report said that a 12-month study of the smallest animals of the channel, the zooplankton, failed to reveal any effects of oil pollution. It also cited a U.S. Bureau of Commercial Fisheries report that no change in the number of fish eggs and larvae had been found in the area.

Similarly, a study of phytoplankton (small organisms that depend on light and are therefore considered to be plants) has not revealed any effects of oil pollution.

The Hancock team also studied the effects of the oil spillage on the Santa Barbara beaches. A survey done during the 10 months after the spill failed to show any damage due to oil pollution.

The USC study cited three surveys made of tidal areas, the most recent one being in 1970. The latest survey showed a decrease in the number of species of algae, but the difference was due to more people on the beach, rather than oil pollution.

A small acorn barnacle was the only marine species to be badly affected by the oil spill, according to the report. In the case of this barnacle, death was due to smothering by oil rather than any toxic effects.

A small area of the seal colony on San Miguel Island was contaminated by oil. Although many of the animals were covered completely with oil, capture of tagged "oiled" and "un-oiled" seals 12 months later showed no difference in the death rate.



Last year property owners lost more than \$300 million from burglaries. The highest month for losses was July.

Even though you will be taking a vacation this summer, your neighborhood burglar won't. He will be on the lookout for houses that seem empty.

Do follow this checklist to create uncertainty in the mind of the burglar:

Use automatic electric timing devices to turn on your lights for you. Nothing discourages a burglar like light. Advise your police of your lighting system so patrolmen will expect the lights.

Also tell the police how long you will be gone and whom they can call in case of an emergency.

Leave curtains and blinds partially open so burglars can't hide behind their cover.

Close and lock all doors including the garage and tool shed doors.

Put away all garden tools, golf carts, lawnmowers, barbecue grills, etc.

Store all valuables in a safety deposit box at your bank. Don't leave stock certificates, bonds, important contracts, mortgage papers, leases or jewelry at home while you are gone.

Even boat owners should take extra precautions whenever they plan to be away for a lengthy time. Make sure your marina is reputable, stow all portable or loose gear, keep a record of registry numbers of boats and serial numbers of motors.

Don't make the following mistakes:

Don't stop milk or other deliveries by leaving a note on your door. Call or write a request to stop service.

Don't publicize your vacation.

Have someone pick up your mail or circulars, don't let them pile up at your mailbox.

Don't let the yard go untended.

Don't leave keys for the second car at the house, lock them in your safety deposit box.

While on the trip, don't carry too much cash, use Traveler's checks and charge cards. Be sure to take the keys out of the ignition everywhere you stop, even in the deep woods. As an added protection, make sure home, fire and theft insurance is paid up in case something should happen while you are gone.

**WOOD RIVER LAB CONTINUES RECORD,  
PASSES 9 MILLION SAFE HOURS MARK**

One of the better safety records in U.S. industry continues to build at the MTM Research Lab--Wood River, where on June 22 employees passed the 9-million mark in man-hours worked without a disabling injury.

The record, marking 29 years without a lost-time accident, is the best logged by an oil company research laboratory in this country. It dates from June 23, 1942.

The lab, located adjacent to the Wood River Refinery, is the center of Shell's research and development efforts to design fuels and lubricants for the future.

## CLASSIFIEDS

FOR SALE

Two 26" girls bicycles, \$12.50 each.  
Telephone: 472-3147

Pool table--slate top, all around good condition, \$225.  
Telephone: 472-8143

1966 Chevrolet pickup, air, automatic, long wheel base, with camper, \$1085. Philco refrigerator, good working condition, \$30.  
Telephone: 645-1155

Corner acre, beautifully wooded, located in Timber Ridge, Montgomery County, restricted, swimming pool and lake facilities.  
Telephone: 692-2110

Beautiful german shepherd puppies, AKC registered, black & tan, guard dog stock, \$75 for male, \$50 for female. 6 weeks old, shots & wormed, choice of litter.  
Telephone: 485-3064

'70 Chevelle SS 396, gold with vinyl top, air, power steering, discs, factory stereo, \$2695.  
Telephone: 479-2406

14 ft. Mon-Ark aluminum boat and trailer, with Mark 20 outboard motor, \$545.  
Telephone: 471-2427

1967 VW bug, A-1 condition, white wall tires, radio, heater, new brakes & battery. Blue with white interior, \$1,000.  
Telephone: 444-8870

1966 Pontiac Bonneville, extra clean, fully loaded/deluxe extras, new tires, see to appreciate.  
Telephone: 645-2829 or 944-3040

12" Radial arm saw, hvy. duty, industrial, Walker-Turner, 110-220V, \$200 cash.  
Telephone: 473-4103

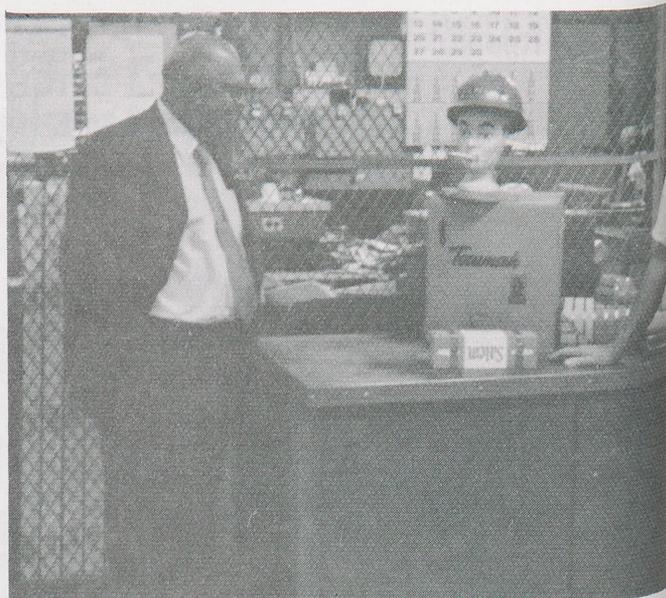
12 ft. sailboat with trailer, excellent condition, \$375.  
Telephone: 488-4203

Used GE central heating unit. \$50.  
Telephone: 479-3355

PERSONALS

To all of my friends and acquaintances, good-bye and good luck to each of you. I was unable to get around to see each of you personally so I hope this note will reach those of you I missed. I greatly appreciate the retirement gifts; they will be well used in my retirement. Gracie and I will be at home in our "bunk house" just north of Marble Falls, Texas, after August 1. We hope to have our big house built by the end of the year. If you are passing by, stop in and see us.  
Walter C. Felscher

AD DEADLINE--WEDNESDAY, 9 A.M.



O. H. Mendel, Engineering Foreman, Engineering Field, received a variety of gifts from friends upon his retirement July 1.

In Bay Marchand**SHELL ADS THANK THOSE INVOLVED IN CONTROLLING PLATFORM FIRE**

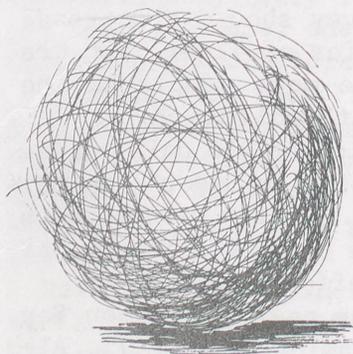
Now that the Bay Marchand fire is out, Shell has taken the opportunity to "thank a few thousand people" for their help, understanding and patience.

In ads appearing in the Oil Daily, Oil & Gas Journal and other publications in the New Orleans area, Shell extended its appreciation to everyone directly or indirectly involved in efforts to control the offshore blaze.

Mentioned were people who suggested ways to control the fire, state and federal agency representatives who worked with the Company to protect the environment and the public interest, members of the news media who kept the public informed, scientists and environmentalists who offered assistance, and the companies that came to Shell's aid with equipment and special expertise.

The ads also thanked 650 Shell and contract employees who helped unselfishly.

**Before I joined the  
Payroll Savings Plan  
all I could save was**



**string.**