



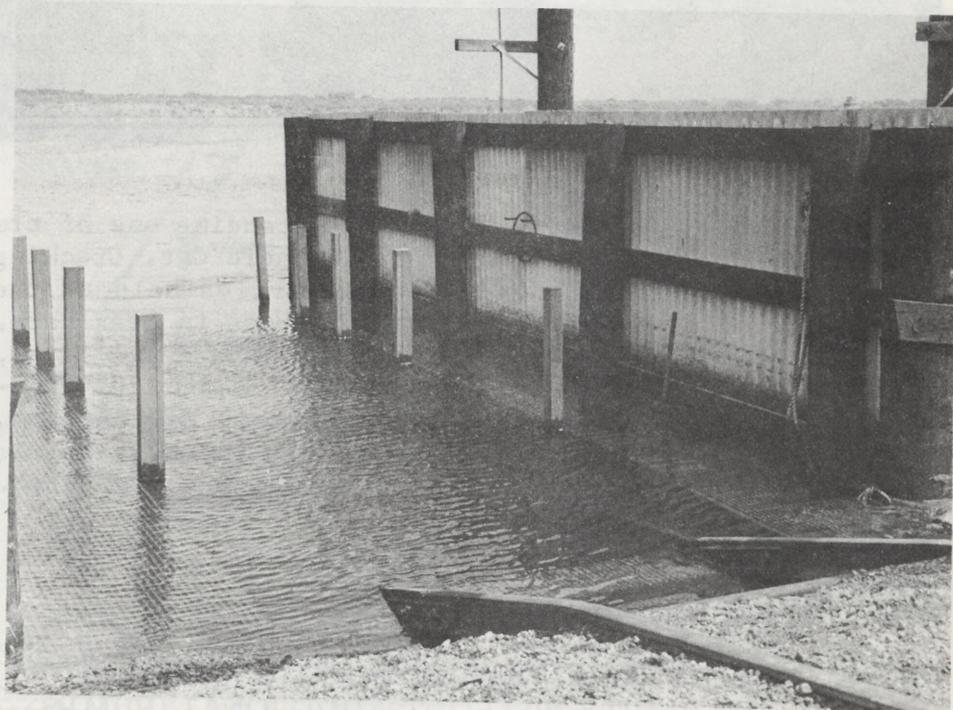
Houston Refinery

# Shellegraph

Friday, August 31, 1973

Volume 38, No. 20

## UNIQUE DRY DOCK INSTALLATION DESIGNED TO HOUSE "BUSTER D"



W. E. Elliott, carpenter No. 1, inspects the saddle which supports the "Buster D" while stored. The presently used slip is the former foundation of the boathouse. Note the regulation-size railroad tracks.

Shell engineered project for the "Buster D" dry dock was completed Wednesday, September 19. This unique installation uses a railroad-track type of launching device to get the boat in and out of the water.

The carpenters handcrafted a saddle for the dolly and installed guards in the slip. An air winch hoist pulls the boat out of the water onto the dolly, up the tracks, and into the newly constructed boathouse. A set of 100-foot regulation-size railroad tracks and four former side-car wheels were utilized in this project. The tracks are capable of holding loads of 200 tons. Although the boat and dolly only weigh two tons, it was more practical to use the tracks which were available than to design and construct a new device.

The dry dock boathouse, which measures 35 by 15 feet, was designed by Engineering Services, built by Engineering Field, and will be maintained by the Dispatching Department. It was built to replace the

boathouse which was located on the water but due to land subsidence would often flood during high tide. The roof of the old shed was cut off and

put on top of the new pilings. Guards were installed along the sides of the walkways to get the "Buster D" in the slip.

## CRAFTSMEN DO OUTSTANDING JOB ON DU2 SHUTDOWN

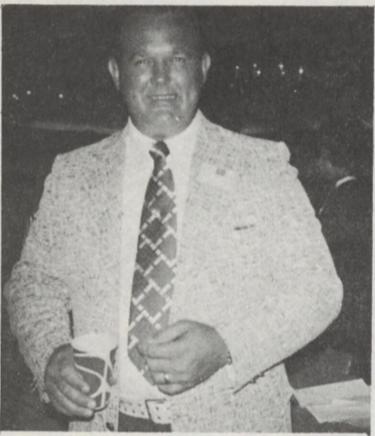
Skilled craftsmen have been recognized for an outstanding job done during the DU-2 emergency shutdown August 20-23. A part of the project involved getting into the crude column quickly to see what was wrong and to get it back on stream as soon as possible. A boilermaker crew also made emergency repairs to buckled trays on site. Engineering Services cooperated with Engineering Field in accomplishing this project.

B. J. Flurry, boilermaker No. 1, Engineering Field, who has been with the Company for 4½ years, "took the initiative, get-up-and-drive to enter the tower, and he stayed on the job until it was finished,"

said Red Washmon and Buck Miller, engineering supervisors, Engineering Field.

The primary job involved was getting the column open and to determine the extent of the work to be done. There were six inspection plates that had to come out and this was accomplished in one hour and 15 minutes by Flurry and A. C. Rainey. It was also necessary that some extensive revisions, such as nine percent chrome piping be done by the pipefitters and welders. L. B. Hill, pipefitter No. 1, was the lead man on measuring the details of this delicate piping job," said Washmon.

(Continued on page 3)



Guests attending one of the recently held Cat. Cracking safety parties held at the Hickory House in Deer Park. They include Mrs. Bob Bryan, Mrs. "Spot" Lisano, Mr. Charlie Barnhart, Mr. and Mrs. Robert Matkin, Mrs. Howard Ringo and Mr. Howard W. Ringo.

**DEVELOPMENT DISCOVERS PEP-4 TO INCREASE PIPELINE CAPACITY WITHOUT ADDITIONAL PUMPS**

Shell Development Company reports it has discovered an efficient method of expanding the capacity of a crude oil pipeline without increasing the size of the line or pumping facilities.

The new system uses a polymer injection technique that increases the flow of crude by reducing friction and turbulence inside the line. One of the features of this technique is a new Pipeline Expanding Polymer (PEP-4) developed by Shell Chemical Company.

Elmer Milz, Manager of Shell Pipeline Research and Development Laboratory, explains that turbulence and friction occur inside a pipeline as the pumps push the oil through the line. Small eddies are formed along the inside wall of the pipe, causing a build-up of friction which seriously impedes the flow of oil.

When polymer is added to the oil, it helps prevent small high-velocity eddies from forming inside the pipe. The polymer actually helps promote the formation of large, slow eddies which produce less friction. As a result, internal friction is reduced

significantly and pumping capacity increases without installing additional pumps or lines.

By using PEP-4, friction can be reduced up to 50% near the point of injection, says Milz. Further down the line, reductions of between 15% and 25% are possible. This reduction in friction continues as long as injection is maintained and polymer is present in the crude.

Shell has conducted numerous field and laboratory tests using the polymer with many types of crude oil. The results have always been the same—a dramatic reduction in friction occurs. During the past several months, PEP-4 has been undergoing full scale field tests using Shell's heavy crude transported in a 24-inch pipeline.

PEP-4 is a solid hydrocarbon compound, for which Shell has developed techniques for introduction into pipelines.

Milz says the full scale tests have confirmed all of the laboratory findings and field studies. It has been clearly demonstrated that the polymer can effectively reduce friction in crude oil pipelines.

**MTM PROCESS R and D EMPLOYEES HOLD OWN UNITED FUND CAMPAIGN**

Employees of the MTM Process R&D Lab will be having their own United Fund campaign as part of Shell Development's drive, said W. W. Koenig, chairman, Wednesday.

This drive is scheduled for September 5-14 while the Refinery drive, a joint project of Shell Oil Company and OCAW Local 4-367, will be held September 10-14.

Seventeen solicitors will contact the more than 200 MTM Process R&D Lab employees in an effort to meet the Research complex goal of \$50,000. Last year Lab employees contributed some \$8,000. With a 96 percent participation, the average contribution was \$43.50 per employee.

The Refinery employees' drive has a \$40,000 goal, a 3.3 percent increase per employee over last year's goal.

**DRIVING SAFELY BEGINS WHEN YOU ENTER AUTO**

September is indeed the time that the youngsters return to school - so be careful when you pull out onto the highway. Make certain that you drive at a reasonable speed for the circumstances around you. Remember driving too fast puts you as well as others in danger if you should lose control of your car or have a flat.

Driving safely should begin as soon as you get into your car going to or from work. This includes driving on the Refinery roads. The few minutes you save by speeding out of the Refinery are not worth risking your life.

**SEPTEMBER'S THE MONTH for BACK to SCHOOL**



**"ALWAYS DRIVE CAREFULLY" SHOULD BE OUR RULE.**

### CAPLINE EXPANSION UNDERWAY TO UP CAPACITY: IT WILL EVENTUALLY TRANSPORT 1.1 MILLION B/D

Capline, already the nation's largest crude oil pipeline, is being expanded by 38 percent, bringing its design capacity to 743,000 barrels of oil a day.

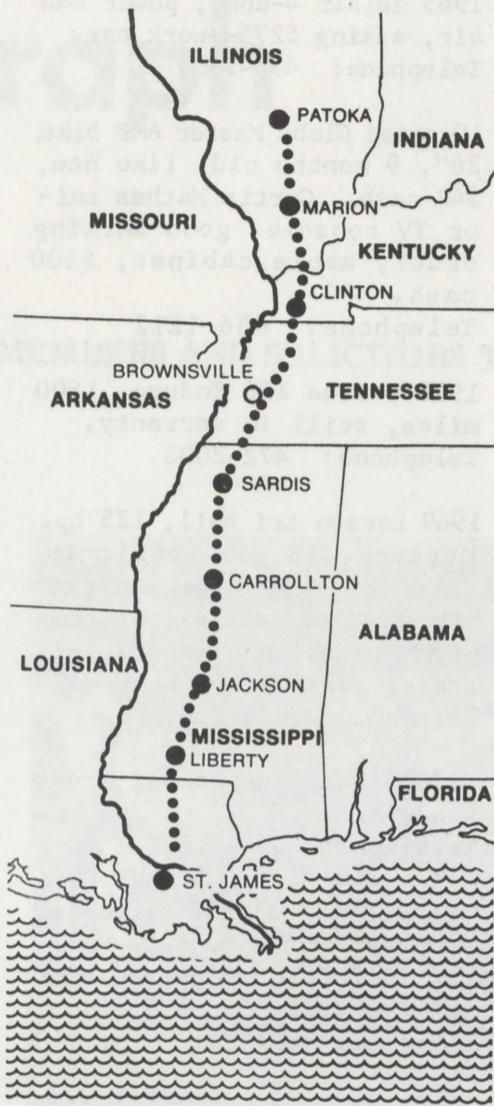
The 634-mile, 40-inch diameter pipeline is owned by seven companies and extends from St. James in southern Louisiana to Patoka in southern Illinois. Current work on the project, which is divided into eight phases, began in June and is scheduled for completion in 1974.

Shell Pipe Line Corporation, operator for the system, reports that in addition to increasing the throughput capacity, the expansion will include new storage and tanker unloading facilities.

New facilities will include a 13,000 horsepower pumping station at Brownsville, Tennessee (near Memphis) and a total added 34,000 horsepower in pumping capacity at the seven existing pumping stations and the St. James terminal.

Storage at both ends of the line will be increased with six,400,000 barrel tanks being added at St. James and three,06,000 barrel tanks being built at Patoka. A new dock is being added at St. James and the existing tanker-unloading facility is being modified to increase the combined tanker-unloading capacity rate to about 45,000 barrels an hour.

Capline went into operation in 1968. A continuing expansion program will ultimately boost the line's design capacity to 1.1 million barrels a day.



CAPLINE SYSTEM ○ NEW STATION

### EDITOR ON VACATION NO SHELLEGRAPH UNTIL SEPTEMBER 14

The Shellegraph Editor will be on vacation the week of September 3. All ads turned in after this week's deadline will be included in the next paper on Friday, September 14.

### DU2 SHUTDOWN (Continued from page 1)

This was the third time that DU-2 has been shut down for maintenance. This project took a total of 250 mandays to complete and according to Washmon and Miller, "everyone did a fire job." Also cited for their outstanding contributions during this shutdown were temporary foremen, Jeff Lieder and W. D. Alfred along with J. W. Lovett, pipefitter No. 1.



Two recent transfers from One Shell Plaza won honors in the June 24 Shell Club of the Plazas Golf tournament.

Dan Baldwin, Employee Relations, was runner-up in the second flight. Gene De Laveaga, MTM Process R&D Lab, won a prize for hitting closest to the pin on number 6.

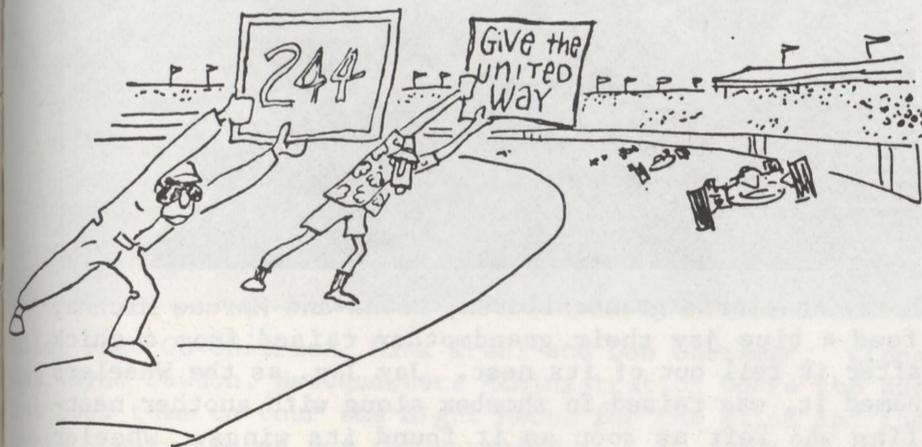
### PIPELINE BUILDS COLEX TERMINAL NEAR PLANT TO TIE IN WITH SINCO

Shell Pipe Line is building an unusual products pipeline terminal near the Refinery on Highway 225 and Phillips Petroleum Road. Construction of the new Colex Terminal began in May 1972 and is scheduled for completion in October.

The Colex Terminal will enable Shell to deliver products simultaneously to two major products pipelines--Colonial Pipeline and Explorer Pipeline. A related part of the project involved installation of the Sinco pump station located inside the Refinery gates.

The Sinco Station (named after the Sinclair Company pipeline purchased in 1945) pumps the products from the Refinery to the Colex Terminal prior to delivery to Colonial Pipeline and Explorer Pipeline. The station has a capacity of 8,000 barrels an hour with its two 1,000 horsepower pumps.

Sinco Station, Pasadena Marketing Terminal and Colex Terminal will be computer controlled from Shell Pipe Line's Pasadena Terminal. Until Colex is operational, Shell will be delivering products to Colonial and Explorer by a circuitous route utilizing other companies' pipelines.



**CLASSIFIEDS**

**FOR SALE**

16' Dem craft, tri hull, walk through windshield, 65 hp. Mercury, 6 months old, still in warranty. \$200 and take up notes or \$2,600. Telephone : 473-4707

1972 Hallmark trailer, 12x60, 2 bedroom, 1 bath, assume payments (approximately \$5500 left). Also AC for trailer, purchase separately. Telephone: 526-6341, 9-5

Penncraft washer, dryer, dishwasher, assume payments. Telephone: 526-6341, 9-5

'73 Honda 350 CB, 5 mo. old, \$850. Telephone: 477-2836

Olds alto saxophone and case, good condition, used only 6 months in band. \$100. Telephone: 644-0133, after 6

'71 Yamaha Super Dirt bike, 125cc. milled head, high compression piston, expan. chamber, racing magneto, compression release, 26mm carb., many other extras, like new condition. \$375. Telephone: 474-3370

14 ft. aluminum Ouachita semi-V boat, 15 horse Evinrude motor, small wheel galvanized trailer, trolling motor, tarp

**W. L. CALDWELL DIES SERVICES HELD FRIDAY**



Willie Lee Caldwell, Sr., 68, died Wednesday, August 22, in a local hospital. He retired October 1, 1964, as a pumper No. 1, at the Dubbs Pump House in the Thermal Cracking Department. He is survived by his widow, Avis, of Rte. 1, New Baden, Texas. Funeral services were held Friday, August 24, at the Forest Park Lawndale Funeral Chapel.

to fit top of boat, other extras. Very reasonable. Telephone: 473-0635

1965 Belair 4-door, power and air, asking \$275--work car. Telephone: 472-7009

10-speed Globe Master AMF bike, 28", 9 months old, like new, \$40 cash. Curtis Mathes color TV console, good working order, maple cabinet, \$100 cash. Telephone: 686-1212

1973 Yamaha 250 Enduro, 1800 miles, still in warranty. Telephone: 472-2003

1969 Larsen tri hull, 125 hp. Mercury, 18 gal. built in tank. Big wheel galvanized tilt trailer, all extras from props to ski equipment. A-1 shape. \$2300. Telephone: 926-7301

1970 Volkswagen camper, runs good, \$2150. Telephone: 426-2168

Wooded lot, 80'x150', located in Indian Shores on Lake Houston, all utilities, paved streets. \$6,000. Telephone: 426-2168

1964 9-passenger Dodge station wagon, runs good. \$150. 531 Oakdale, LaPorte (Shore-acres). Telephone: 471-0459

GARAGE SALE Sat. & Sun., Sep-

tember 1 & 2--Furniture, draperies, fabric, Mexican light fixtures, lamps, accessories, 4111 Longgrove, Clear Lake Forest. Telephone: 334-2229

2 horses for sale-paint & stallion. Telephone: 479-2082

1972 gold Plymouth Scamp with vinyl top, like new, 7,800 actual miles, V8, air, power, radio, white sidewall tires, excellent condition. One adult owner-driver. Telephone: 479-3755 after 5

1965 Chev. Impala 4-door, 283 cu. V8, auto trans., htr., radio, A/C, good tires, new air shocks, low mileage, immaculate inside and out, \$695. Telephone: 472-5906 weekdays or 224-5279 weekdays

1 or 2 acres in Pasadena on Anthony Lane, inquire at 1122 Glenmore.

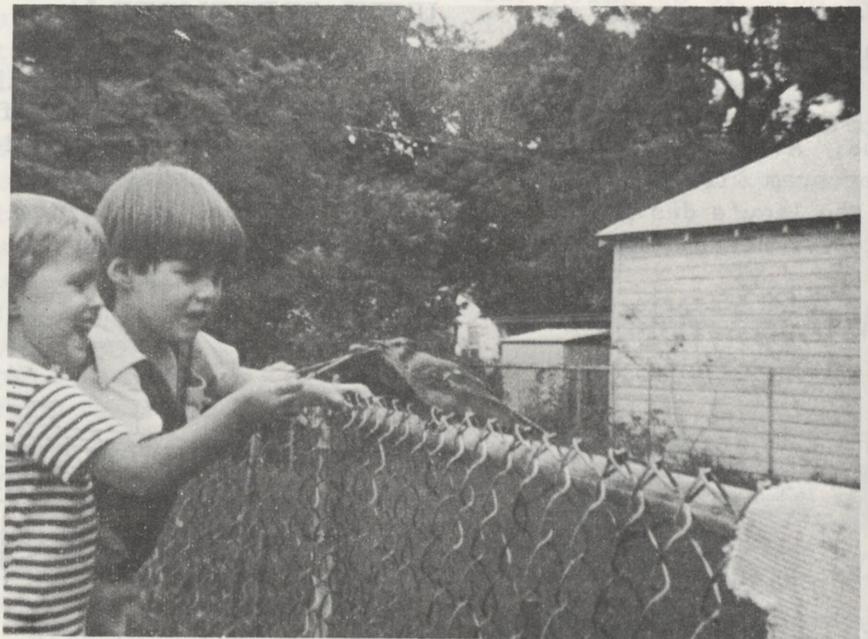
**WANT TO BUY**

Exakta or Linhof camera. Telephone: 333-2750

**PERSONALS**

I wish to thank all my friends for the nice gifts and the retirement observance. You will always be remembered. God bless you all.

- Bobby Batts



H. J. Wheeler's grandchildren, Deana and Marcus Michna, feed a blue jay their grandmother raised from a chick after it fell out of its nest. Jay Jay, as the Wheelers named it, was raised in shoebox along with another nestling who left as soon as it found its wings. Wheeler says Jay Jay would go with them on weekend trips until it too heard the call of the wild.