A surge relief system has been installed and tested at the Uwaigilah auxiliary pumping unit to boost the capacity of the Rafha-Badanah pipeline section.

Purpose of the system is to reduce the pressure surge component in the pipeline on tripping of the APU at Uwaigilah thus allowing higher operating pressure out of Rafha when the APU is on stream. As a result, the capacity of the Rafha-Badanah section of the pipeline will be increased by about 10,000 barrels per day.

Installation of surge protection facilities at Uwaigilah will permit to increase the Rafha-Badanah section capacity by allowing higher outbound operating pressures from Rafha.

Work on the system at Uwaigilah was completed March 31 with installation of:
1. A pressure relief valve which opens upon turbine trip and remains open until the APU suction pressure drops below the set point.
2. A pressure reducing station consisting of a set of friction tubes to dissipate the surge pressure, a 10-inch high-pressure header feeding the friction tubes and a 14-inch low-pressure header transferring oil from friction tubes to surge tanks.
3. Two surge relief tanks of 1,500 barrel capacity each that receive surge oil and store it until

(Continued on page 2)
Said Ahmad Rashidi, Senior Shift Foreman, Rafha. (Photo by Nasr)

Congratulations to Said Ahmad Rashidi who became in February the fourth senior shift foreman in Saudi Arabia. He joined the ranks of Hmood Stepno, who became in February 1956 and senior shift foreman in February 1956; Badanah and N. (Continued from page 1)

SPOTLIGHT

Forty-eight Tapliners from Beirut Headquarters volunteered to donate blood to the Lebanese Red Cross on March 3, when a LRC team invaded the Beirut Clinic to organize the blood donation campaign. The LRC representatives expressed their gratitude and appreciation for this gesture. Shown above donating blood at the Clinic are Mrs. J. H. Rosquist and Mr. Brisco. (Photo by Nasr).

FOUNDER WORK ON TWO SIDON TANKS IS COMPLETED

Work on construction of two 500,000 barrel crude oil storage tanks at Sidon Terminal is progressing at a good pace. On Feb. 27, or three months after ground for construction of the two tanks was broken, all foundation work was completed and steel erection started on the first tank bottom plan.

The new tanks will boost gross crude oil storage capacity from 370,000 to 500,000 barrels. These will be among the largest tanks presently in use at any oil installation in the Middle East. Each tank will have a diameter of 253 feet and a height of 56 feet.

Uwaigilah Surge Relief System

(Continued from page 1)

it is pumped back into APU

section. 1. A new all-time loading record was established at Sidon Terminal on March 11, when the ESSEX WARWICKSHIRE took aboard 594,639 gross barrels of crude oil in 9 hours and 13 minutes, or at an average loading rate of 19,964 barrels per hour with a maximum one-hour loading rate of 62,047 barrels.

Spring has brought back balmy warmth to Robin T. Verhoeven of Rafha and his gazelle. (Photo by Nasr)
Two Saudi Home Ownership Plan houses went under construction at Qaisumah (above) recently for Cook Baker Saud... This summer's... paint holds up traffic. You should:

1. Accelerate to pump your brakes (hard on the pedal). True or False?

2. Continue on but make sure not to stop in the path of your car. False.

3. Slow down but not necessarily hold up traffic by stopping. True or False?

4. Proceed, since you are safe. True or False?

5. Stop and yield the right-of-way to him. True or False?

6. Turn signal lights. False.

7. Stop and wait until the school bus is stopped on a rural highway to load or unload children. You don’t have to stop when you are coming from the opposite direction on a multiple-lane highway with an unopened median strip between the lanes. True.

8. Traffic from both directions must stop when a school bus is stopped on a rural highway to load or unload children. False.

9. True. About half of these tragedies happen at home instead of out-of-the-hunting fields. True or False?

10. True. Many companies have safety programs. True or False?

11. True. Their injury rate is about eight times that of the general population. True or False?

12. True. Many companies operate safety programs. True or False?

13. True. About 2,200 persons are killed annually in house fires. True or False?

14. True. About half of these tragedies happen at home instead of out-of-the-hunting fields. True or False?
THE OIL INDUSTRY IN THE NEWS

Information matter reported in this column is compiled from and based on reports recently published in Petroleum Intelligence Weekly, Oil and Gas Journal, Platt's Oilgram, Petroleum Engineer and Petro/Chem Engineer.

U.S. IMPORTS

United States imports of crude oil end products averaged 3.4 million barrels daily in 1965—up 200,000 barrels daily from 1964. The Middle East accounted for 27 percent of the crude imports and Africa for another five percent: the combined total of 32 percent was much higher than Canada’s share (23 percent) and was slightly exceeded by Venezuela, whose share was 30 percent. “Imports from Middle East countries had the most spectacular growth. In 1963 the Middle East supplied 27 percent of United States crude imports, compared with 25 percent in 1964.”

Authorities differ on the import outlook for 1966. The United States Bureau of Mines predicts that increased production in the United will result in a “slight decline of imports.”

Another authoritative source offers these predictions for 1966: “We expect imports over the next five years to increase at the rate of 6.1 percent per year up to a total of 3,032,000 barrels a day by 1970. For the last five years the import percentages and the total import barrels have increased constantly. In 1965, imports accounted for approximately 22.1 percent of total domestic demand.”

PETROCHEMICALS

The movement of United States firms into the foreign petrochemical field will continue at an unabated pace—despite efforts by the United States Government to curb the outflow of dollars needed to build such plants.

Such movement is necessary; it is no longer possible for a United States—based company to compete in foreign markets with producers made in domestic plants. Operating efficiency in the United States is no longer far enough ahead of that in other countries to offset higher raw material and labor costs, and too many other countries now have their own or competitive sources of supply.

To remain competitive on a worldwide basis, therefore, a United States Company must move overseas and build plants in other countries where it can compete on an equal footing with local plants. The American petrochemical industry has been doing this: its foreign investment in 1965 totaled about $855 million.

JAPANESE SELLING

The Arabian Oil Co. of Japan has finally “reached agreement” to sell 26.25% of its total oil production in the Neutral Zone in the Middle East to these companies: 10% to Kuwait National Petroleum Co. and 16.2% to an American combine (Cities Service and Continental Oil).

LIBYAN OUTPUT

It looks like a sure bet that Libya will surpass Iraq and become the fifth largest oil exporting country sometime this year as further production gains are piled on top of 1965’s whopping 41 percent boost over 1964 levels. Production in 1965 averaged a shade over 1.2 million barrels per day compared to 882,300 BPD the year before. Iraq production stood at just over 1.3 million BPD in 1965, up only 4.9 percent from a year earlier. All 26 of Libya’s concessions holders signed legal agreements Jan. 26 extending their existing concession contracts to make them consistent with the new oil law. Revised revenue figures prepared by Libyan Petroleum Ministry officials showed their latest estimates of extra income resulting from the new law stood at $117 million on 1965 operations and $122 million additional for 1966. Total oil income is thus expected to hit $388 million for 1965 and $477 million for 1966.

MIDDLE EAST OUTPUT

Middle East crude oil producers raised a substantial output boost in 1965, but fell short of their percentage gain of a year ago. Production in 1965 averaged 8.2—million barrels daily, a 9.3 percent hike over 1964. In 1964, production had jumped 11.3 percent over the 1963 level.

Among major producing areas, Saudi Arabia had the biggest increase—16.3 percent. Output in Iraq was up 9.3 percent, while Kuwait and Iran had gains of 4.9 percent and 2.3 percent respectively.

Of the smaller producing areas, Abu Dhabi had the biggest percentage boost, bringing output over 50 percent. Production in Bahrain was up 15 percent, while Qatar produced an 8.4 percent, giving a total figure only fractionally higher than in 1964. Individual country figures in thousands of barrels daily follow:

1965 Change
1964

<table>
<thead>
<tr>
<th>Country</th>
<th>Production</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arab Emirates</td>
<td>2,101.7</td>
<td>+81.1</td>
</tr>
<tr>
<td>Kuwait</td>
<td>2,388.9</td>
<td>+2.3</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>2,206.2</td>
<td>+16.3</td>
</tr>
<tr>
<td>Iraq</td>
<td>1,261.6</td>
<td>+9.3</td>
</tr>
<tr>
<td>Iran</td>
<td>1,078.3</td>
<td>+4.9</td>
</tr>
<tr>
<td>Libya</td>
<td>157.0</td>
<td>+1.3</td>
</tr>
<tr>
<td>Qatar</td>
<td>195.9</td>
<td>+2.7</td>
</tr>
<tr>
<td>Bahrain</td>
<td>73.5</td>
<td>+17.9</td>
</tr>
<tr>
<td>Total</td>
<td>7,990.7</td>
<td>+9.1</td>
</tr>
</tbody>
</table>

Face-Lifting Operation At Rafha

Palm trees have already been planted in the yard facing the 14—room bachelor quarters at Rafha.

Deadly Sins of Supervision

1) Snap judgment selection of employees. Poor selection can mean years of employee unhappiness, conflict with fellow employees and low productivity. (Personnel Journal, June 1965).

2) Letting the job grow without hiring more people. A boss must carry them through; 4) Being a boss rather than a leader. A martinet may get the small jobs done, but he doesn’t command the kind of loyalty needed to handle those really big, really tough jobs; 5) Indulgence towards discipline and recognition. High Morale plus high productivity require a supervisor who demands high performance—and who recognizes and rewards achievement. (Personnel Journal, June 1965).
Pipelineline Periscope

Qaisumah

Dr. Fuad Iliya of Beirut was here in late February to do audiometric and eye examinations. Congratulations to Senior Shift Operator Mrs. M. M. Norton and Senior Operator H. Feldman, Mr. Nour, Mr. Mutlag, Station Superintendent C. 8. Babb, Senior Shift Foreman Hmood Nazzal and Mr. Abdullah, Aziz returned from leave on Feb 22.

The Badanah hospital soccer team trounced the rest of the stations 6-2 in a friendly match last week. The two teams included, from left, Koorinch, A. Sabri, Talib, Bader, S. Baluchi, A. Baluchi (coats); and standing: M. Nujaidi, M. Al-Madini, A. Jawad, S. Shihan, Y. Jawad, A. Shoman, S. Rashed, A. Al-Mtadi, E. Ismail, N. Safwan and S. Jeed.

Turaif

J. L. Koeberich, J. H. Bouguet, Leonard Bienen, C. S. Ralls, and R. L. Cooksley, the outgoing Communications Supervisor was presented during a dinner and dance at the Badanah Patrol Camp on March 19.

The Badanah baseball team scored two runs in the tenth inning to defeat the rest of the stations 7-5 in a friendly match last week.

The new Tapline police force is being trained at the station. Two employees of the C. E. & I. staff followed the presentation. Mr. and Mrs. M. A. Kearney celebrated an anniversary at the Babbs' patio on March 5. Punch, cookies and coffee were served. Assisting Mrs. Kearney were Mrs. M. M. Norton and Mrs. J. H. Bouguet. The winners of a sweep were Mrs. J. L. Stephens and Mrs. E. R. Robertson.

John Makkinje of Sidon arrived here March 5 on a relief assignment to the Babbs' station.

Turaif's Never-Grown Golf Group has planned a 3-week End-of-Season Tournament for the March 26-25 weekend. All prizes for the 1965-66 golf season will be presented at the March 25 banquet held in the Community Center.

Visitors have been: Madeleine for laboratory technician K. Jarrett-Kibbe and Motor Transport Mechanic Muhammad Sudal.

Qaryatan

J. L. Stephens, Senior Engineer Field Services, Turaif, visited Qaryatan in late February on company business.

Accountant Ellie Youkas of Beirut and Lead Materials Specialist Abd Al-Aziz Abush Shibli and Senior Operator Hanif Haji were guests.

J. L. Koeberich visited the station on March 19.

General Mechanic Hibb Abdul Aziz returned from leave on March 16.

Turai

The Saudi Arabia Ministry of Health has appointed a Quarantine Officer in Turai. All international certificates are being checked by this official for smallpox and cholera inoculations.

All employees, family members and guests going to Arabic should check with the Beirut Clinic before they go, so as to make sure that these inoculations are up to date. Otherwise the Quarantine Officer in Turai will give them the inoculations.

During the March 7-9 absence of M. A. Koonreich, the CEO, it is expected that the CEO would return to Turai which extended his trip to the Kingdom of Jordan.

Transportation Dispatcher Muhammad Sultan returned Feb. 27 from a vacation trip to the Kingdom of Jordan during over 40 days. The trip included a trip to Brussel, Holy Moses and Riyadh. Mr. Sultan discusses his vacation as "one of the most beautiful I have ever had," and he was able to visit a lot of the places in the Kingdom which I hadn't seen before. I was greatly pleased and impressed by the great and gigantic improvements in the means of communication, public utilities, agriculture, sanitation and schooling.

Congratulations to Motor Transport Mechanic Muhammad Hanan on his February wedding.

Three employees currently joined the select group of Saudi Arabia Tapliners holding the company's "Silver Certificate for English Proficiency." They are Shift Foreman Mohammad Shibli, Mathew Matthew of Salmon of Government Relations and Supervising Patrolman Hamdan Aiunu.

Mrs. George Farah held a surprise birthday party for Mrs. Adel Zaidy on March 5. Punch, cookies and coffee were served. Assisting Mrs. Farah were Mrs. M. M. Norton and Mrs. J. H. Bouguet. The winner of a sweep was Mrs. E. R. Robertson. Other winners of prizes were Mrs. J. L. Stephens and Mrs. E. R. Robertson, John Makkinje of Sidon arrived here March 5 on a relief assignment at the Babbs' station.

Mr. and Mrs. M. A. Kearney returned March 19 from a business trip to Paris and Zurich. Also making the trip to Zurich were Mr. and Mrs. J. L. Stephens.

Silver Certificates for English Proficiency

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PIPELINE PERISCOPE

President W. E. Locher, J. J. Kelberer, G. H. Canoles, M. A. Kearney, A. E. Olson, R. C. Hill, and F. N. Khabbaz, representing essential services, are getting things organized for the Tripoli to Tapline inter-station bridge tournament, which will be held in Rafha April 6-10. The golfers are expected to enjoy a cook-out at the C. P. Booth Golf Clubhouse.

The Badanah community expressed its thanks to the Saudi Government’s Main Labor Office in Damman, which was scheduled for March 15-18, for inspection of the terminal and pipeline.

The Tapline Sport Club had a three-day junior tennis tourney on Feb. 16-18 at the Tapline Sport Clubhouse. The competition was won by Amjad Ghanma with a low net of 62 for 18 holes. Prizes were distributed later.

Robert E. Marsh returned to Jordan from a trip to Turaif March 12, returning March 9 from a four-day business trip to the terminal and pipeline in Libya during the last quarter of 1962.

Mr. and Mrs. C. H. Hardwick enjoyed a cook-out at the C. P. Booth Golf Clubhouse on Jan. 26. The visitors were Mr. and Mrs. C. H. Hardwick, the host M. Nassir, M. Salim, Mr. and Mrs. M. A. Kearney, the host M. Nassir, M. Salim, and friends attended.

Miss Mona Sarkis held a dinner for the Haret-Saida Sporting Club at dinner on the same group at dinner on the same group at dinner on the same group at dinner on the same group at dinner on the same group.

The visit to Tapline of Abdul—Nour Naim, left Beirut for Diabhar March 11 on an inspection visit which extended through the 21st. Secretary Sarkis, Chief Engineer G. H. Canoles, Supervisor J. J. Makkinje who left there for Turaif and assistant local company representative Ahmad Naim, left Beirut for Diabhar March 9 from a five—day business trip to Diabhar March 11 on an inspection visit which extended through the 21st. Secretary Sarkis, Chief Engineer G. H. Canoles, Supervisor J. J. Makkinje who left there for Turaif and assistant local company representative Ahmad Naim, left Beirut for Diabhar March 9 from a five—day business trip to

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A group of girl students from various high schools in Lebanon visited the Terminal on March 10 in preparation for an essay contest on Tapline. The group was accompanied by M. K. Saab and R. E. Khattar. A similar group of boy students visited the terminal the week before for the same purpose.

Pipeline Repair Foreman H. Baassiri accompanied R. N. Purcell, Tapline’s retired Safety Engineer, on a special business trip to the company right-of-way in Lebanon on March 10.

In its meeting of March 4, the Zahrani Country Club Committee elected the following persons for organizing the Tapline Golf Tournament to be held here May 4-6:

Starter: L. A. Rayburn of Medreco
Referee: L. Ford of Saybolt Co.
Scorekeeper: W. Chatham of Charles Martin
Entertainment: Mrs. J. F. Chaplin of Tapline
Program: Capt. W. Ludvigsen of Tapline
Transport and Coordination: R. E. Khattar of Tapline

The trophy awarding dinner is planned to be held at Tabarja Beach.

Laboratory Tester Trainee M. Nasrallah left here in mid-March on a six-week assignment in Qaisumah and Abqaig. He will stay about one week in Qaisumah and about five weeks in Abqaig, training and familiarizing himself with various oil laboratory tests and techniques.

**ENGAGEMENT ANNOUNCED**

Mr. and Mrs. Karl W. Fromberg of Morris Plains, N.J., have announced the engagement of their daughter Karen E. to Richard J. Gelston, son of Turaif’s Coordinator of Materials Inventory and Mrs. Hugh M. Gelston.

Miss Fromberg, a graduate of Elizabeth College, is employed as a hostess with Trans-World Airlines. Mr. Gelston, a graduate of St. John’s University, is a candidate for a masters degree at Pennsylvania State University.

A September wedding is planned.

Meares Karl W. Fromberg and Hugh M. Gelston are former Aramco employees.