To supply the Jordan Petroleum Refining Company with its oil requirements, Tapline has built this unattended control and metering station at Km 1035 at an estimated cost of $32,000. Scheduled to start about August 1, initial oil deliveries through the station will average some 5,500 barrels a day.

Control and Metering Station Completed; Will Supply Jordan Refinery’s Oil Needs

Tapline’s new pressure control and metering station, located west of Qaryatain at Km 1035, is slated to go on stream approximately August 1. Constructed at an estimated cost of $32,000, the unattended station will allow crude oil to flow from the Tapline system to the 8-inch pipeline of the Jordan Petroleum Refining Company, supplying it with its oil requirements.

Aside from reducing pressure of the incoming crude and delivering it at a controlled lower level at the scraper inlet of the 43-kilometer Jordan pipeline, the metering station also measures and records the volume of oil delivered by means of two positive displacement meters equipped with temperature compensators. Drawing electric power from the unattended cathodic protection unit at Km 1035, flow transmitters in the displacement meters will transmit flow rates to a flow recorder at Qaryatain via Tapline’s communication system.

The new installation at Km 1035 also comprises a 500-gallon capacity prover tank which will be used to prove one meter at a time while maintaining flow to the Jordan pipeline through the other. The prover tank is equipped with an overflow drain line extending to a fenced burn-pit located about 300-feet to the south-west of the metering station. Oil from the prover tank can be drained back into the Jordan pipeline by momentarily closing off flow from Tapline.

Initial delivery rates are estimated to average 5,000 to 5,600 barrels per day. The flow rate will be controlled by the Jordan Petroleum Refining Company at the refinery site near Zarga at a steady rate of not less than 2,200 BPD and not more than 11,000 BPD.

Once commissioned, the metering station will require attendance only as necessary to prove the meters, record meter register readings and burn the oil that accumulates in the burn-pit.

SAFETY CONTEST REGISTERS FOUR PERFECT SCORES

Final results of Tapline’s safety contest which was started on April 1 for a period of three months have been announced by Safety Engineering.

With teams from all areas of the company’s operations competing in the safety contest, no fewer than four teams compiled perfect, no penalty scores during the three-month period. Three teams had one-point penalty records and one team had three penalty points. Under the rules of the contest a disabling injury costs a team 10 points; a chargeable motor vehicle accident 5 points; an injury requiring light duty, 4 points; an injury not reported on the day of the accident, 2 points; an injury requiring first aid, 1 point; each day of charged lost-time, 1 point. Members of the winning squads will be presented safety awards.

The leading teams:

BADANAH WINS SOCCER “FIRST”

BADANAH — In the first inter-station soccer match organized along the Trans-Arabian Pipeline, the gods of soccer turned their backs upon a visiting squad from Turaif that lost to a Badanah team, 1-3. Some 700 spectators from ‘Ar’ar attended the Badanah-Turaif soccer encounter July 15 at Badanah.
They say at Turaif that if you have material on order and want to determine its status "at home" all you have to do is pick up the telephone and call the young man who doesn't recognize the word "idle." Matrouk Bin Masha'an, Materials Specialist, Turaif. (Photo by S. M. Siddique).

They say at Turaif that if you have material on order and want to determine its status "at home" all you have to do is pick up the telephone and call the young man who doesn't recognize the word "idle." Matrouk Bin Masha'an, Materials Specialist, Turaif. (Photo by S. M. Siddique).

Operations & Repairs, Qaisu—mah, piled up 47 penalty points to place last in the safety contest.

As "idle" in either his dictionary and Receiving Section of the word "idle." telephone and call the young to determine its status "al hayn." Siddique).

They say at Turaif that if you have material on order and want to determine its status "at home" all you have to do is pick up the telephone and call the young man who doesn't recognize the word "idle." Matrouk Bin Masha'an, Materials Specialist, Turaif. (Photo by S. M. Siddique).

They say at Turaif that if you have material on order and want to determine its status "at home" all you have to do is pick up the telephone and call the young man who doesn't recognize the word "idle." Matrouk Bin Masha'an, Materials Specialist, Turaif. (Photo by S. M. Siddique).

They say at Turaif that if you have material on order and want to determine its status "at home" all you have to do is pick up the telephone and call the young man who doesn't recognize the word "idle." Matrouk Bin Masha'an, Materials Specialist, Turaif. (Photo by S. M. Siddique).

They say at Turaif that if you have material on order and want to determine its status "at home" all you have to do is pick up the telephone and call the young man who doesn't recognize the word "idle." Matrouk Bin Masha'an, Materials Specialist, Turaif. (Photo by S. M. Siddique).

They say at Turaif that if you have material on order and want to determine its status "at home" all you have to do is pick up the telephone and call the young man who doesn't recognize the word "idle." Matrouk Bin Masha'an, Materials Specialist, Turaif. (Photo by S. M. Siddique).

They say at Turaif that if you have material on order and want to determine its status "at home" all you have to do is pick up the telephone and call the young man who doesn't recognize the word "idle." Matrouk Bin Masha'an, Materials Specialist, Turaif. (Photo by S. M. Siddique).

They say at Turaif that if you have material on order and want to determine its status "at home" all you have to do is pick up the telephone and call the young man who doesn't recognize the word "idle." Matrouk Bin Masha'an, Materials Specialist, Turaif. (Photo by S. M. Siddique).
A 32-man Tapline road repair unit sets up camp near a stretch of road east of Rafha. The units carry tents, supplies and Heavy equipment, and are self-sufficient.

Many traffic moving over the 817-kilometer road that connects Tapline's Turaif and Qaisumah pump stations in Saudi Arabia do so at a clip meant to get to some particular destination in the shortest possible time.

Three months a Mercedes-Benz sedans bearing Tapline markings moves over the same route, quite leisurely. Occasionally, for no apparent reason, the car pulls off to one side of the road and stops. In its passengers—a company engineer and two operations men—get out to measure a stretch of roadbed, examine a sample of tire-fouled dirt, and perhaps inspect a shoulder or a drain. One of the men takes a kilometer reading, jots down notes on a pad of paper, and the car moves on.

This is but part of the job that never ends—maintaining the 24-footwide desert road that links Tapline's pump stations in Saudi Arabia. At Qaisumah, a road system maintained by Aramco in Saudi Arabia's Eastern Province joins—

A huge earth-mover gathers fill from a pit near Rafha as a tractor pulls from behind. The earth will be used as road material.

The Tapline road repair unit is capable of carrying eighteen cubic yards of road material. Too large rocks are sorted out by hand and tossed aside before the earth is used as road material. Tapline engineers can tell you, for instance, that Tapline's huge earth-moving equipment rolling over a freshly graded surface in certain areas will cause corrugation to a depth of one and one-half inches in sixty days. After fourteen days of similar exposure there will be 21 inches between peaks and valleys, and the "washboard" surf ace will probably make your trip uncomfortable. Each grading speed is manned by seven or eight Saudi Arabs. Because they usually require a day or more to work their way from one pump station to the next, they must function as a self-sufficient unit, bringing along with them, behind a truck trailer, a house and space parts trailer, as well as their own fuel supplies.

The repair unit is a major asset, requiring some thirty-two Saudi Arab contract employees, and its kind of work it does involves many operations of machine equipment. The giants of Tapline's repair maintenance in such major equipment as the DW-20 Caterpillar earth-movers, 100-ton capacity which can move 18 cubic yards at a time.

Before construction started, no one could foresee neither all the problems which would confront the construction crews as they began their task, nor the solution to these problems. The land itself presented real challenges. Before construction started, no one could foresee neither all the problems which would confront the construction crews as they began their task, nor the solution to these problems. The land itself presented real challenges.

Bechtel's crews built the road at a rate of about 200 kilometers of road a year. The pipeline road, a big job to maintain, was a big job to build. To do the job, starting in 1947, Bechtel International, the contractor charged with laying down the Saudi Arabian end of the pipelines, formed a separate department of road construction specialists made up of forty-three Americans and thirty-nine Saudis. The characteristics of the land itself presented real challenges. Large areas through which the road would pass were covered with foot or more of top cover which truck wheels ground into dust as fine as powder. Sandbars (silt flats) were another problem, as was drainage.

A section of the Tapline road between Badanah and Rafha, viewed from one of two jets that forest one of the turns in the 817-kilometer road. The pipeline can be seen in the distance, at the upper left of the photo.

The characteristic of the land itself presented real challenges. Large areas through which the road would pass were covered with foot or more of top cover which truck wheels ground into dust as fine as powder. Sandbars (silt flats) were another problem, as was drainage.

The volume of commercial traffic moving over the road and entering Saudi Arabia at Afirad fluctuates considerably, but averages between thirty and ninety freight and passenger vehicles per day. Eighteen of the vehicles are stock trucks from Riyadh bound for Basra and north of Tapline. Kuwaitis buy large quantities of fruits and vegetables from Lebanon, and the Tapline road is utilized at the most to transport them. The Tapline route runs through Turaif, under the supervision of R. D. Hawes. Tapline operates a heavy-duty garage where mobile road equipment is maintained and overhauled on the work site. The shop is capable of handling any job, from the repair of any motor in the entire operation, to the rebuilding of a road under certain specific conditions. Tapline engineers can tell you, for instance, that the fastest a road repair unit can move, even under the most favorable conditions, is twenty-five kilometers a month. Tapline's long-range maintenance program is planned on the premise that a repair spread can repair about 200 kilometers of road a year.

The road repair unit, a big job to maintain, was a big job to build. To do the job, starting in 1947, Bechtel International, the contractor charged with laying down the Saudi Arabian end of the pipelines, formed a separate department of road construction specialists made up of forty-three Americans and thirty-nine Saudis. The characteristics of the land itself presented real challenges. Large areas through which the road would pass were covered with foot or more of top cover which truck wheels ground into dust as fine as powder. Sandbars (silt flats) were another problem, as was drainage.

Before construction started, no one could foresee neither all the problems which would confront the construction crews as they began their task, nor the solution to these problems. The land itself presented real challenges.

Bechtel's crews built the road at a rate of about 200 kilometers of road a year. The pipeline road, a big job to maintain, was a big job to build. To do the job, starting in 1947, Bechtel International, the contractor charged with laying down the Saudi Arabian end of the pipelines, formed a separate department of road construction specialists made up of forty-three Americans and thirty-nine Saudis. The characteristics of the land itself presented real challenges. Large areas through which the road would pass were covered with foot or more of top cover which truck wheels ground into dust as fine as powder. Sandbars (silt flats) were another problem, as was drainage.

Before construction started, no one could foresee neither all the problems which would confront the construction crews as they began their task, nor the solution to these problems. The land itself presented real challenges.
Turaif

In early July, the Turaif medical staff welcomed Dr. Maurice N. Atiyeh, a new general practitioner, from Amioun, Lebanon. A recent graduate of AUB's School of Medicine, Dr. Atiyeh lists swimming, reading, and tennis as his favorite hobbies.

The community also took pleasure in welcoming the family of Nazih M. Sheikh, who arrived from Beirut to take over the position of Acting General Superintendent. Sheikh, Superintendent J. T. Pisner and Mrs. Pisner are with him again after spending a memorable holiday in Nazareth, Israel, and Beirut.

M. Ottoman, M. Taki and D. Msaouel, of the Central Stores Department; G. Fedran, H. Ali and A. Azeit, of the Central Mechanics Shop; A. Nahas, of the Marine Transportation division; and A. Hamel, of Government Relations, received safety awards recently for making valuable suggestions that would help reduce accident hazards at the station. Daniel bin Khawateh, a former employee of Tapline, is a valuable member with the transit staff. A former employee of Tapline, Dr. Shamma'a is now in the middle of delivering a series of lectures that proved beneficial to the medical staff. Dr. Shamma'a, formerly of Nazih M. Sheikh, who arrived at the station's medical staff, also attended the investiture ceremony of the senior staff school for the photograph were Diane and Susan Wood and Linda Scharn. (Photo by Mrs. R. A. Prusinski).

organized last April under the direction of Mrs. R. H. Lewis, Leader, and Mrs. R. A. Prusinski, Assistant Leader, Turaif's Brownie Scout Troop held its investiture ceremony at the senior staff school recently and presented several young scouts with their Brownie pins. The troop meets regularly, twice a week—one day being devoted to sewing instructions given by Mr. M. R. Quick, on various topics; and the other day being devoted to activities organized by the entertainment committee of the Zakarian Club on July 16. Mrs. H. M. Jensens and R. A. Prusinski were named to the honor roll before the investiture ceremony.

Said the station's medical staff to Dr. Shamma'a: "We all wish him the best of wishes and send our greetings that would help reduce accident hazards at the station. Daniel bin Khawateh, a former employee of Tapline, is a valuable member with the transit staff. A former employee of Tapline, Dr. Shamma'a is now in the middle of delivering a series of lectures that proved beneficial to the medical staff. Dr. Shamma'a, formerly of Nazih M. Sheikh, who arrived at the station's medical staff, also attended the investiture ceremony of the senior staff school for the photograph were Diane and Susan Wood and Linda Scharn. (Photo by Mrs. R. A. Prusinski).

Sidon

Once again, students from the Tapline school for children's activities are having a break from all 'intellectual pursuits.' Kathleen Tracey, Ivan Walde, Peter Jonas, and Alice Ludwig were nominated to the honor roll before the investiture ceremony.

Public Relations Department, effective July 10, is on a tour of airplane activities at the Hages and New York airports. Dr. L. R. Humes will also keep Periscope readers informed on the state of affairs at Tapline.

Marking ten years of continuous service with Tapline, during which he has earned his name through his dedication and hard work, is Amioun's Daniel bin Khawateh. (Photo by J. R. Bell).
spending his vacation in Iraq. Making the trip from Baghdad to al-Jumaimah cistern (located on the Saudi Arabian—Iraqi border) by car, it is believed Othman became the first Tapliner to use the newly graded road south of al-Najaf.

Abdullah Moussa, who passed away on the Saudi Arabian—Iraqi border during June, has created a pleasant atmosphere there.

As part of Tapline’s new course introduced at Qausaniyah to help Saudi Arab employees become better job trainers, Dawood Salman (left) teaches a classroom, Said Salem, performs a water hardness test and Dawood had explained to him earlier. Observing the training technique in order to evaluate it later are Abdullah Muhammad and Training Coordinator K. E. Parr. (Photo by H. C. Van Putten)

Abdullah Moussa

in al-Husn after a long illness. Abdullah was associated with Tapline for the past nine years, having joined the company at Qausaniyah in October, 1951 as a kitchen boy. To his widow and child as well as to his relatives extend their deepest sympathy.

16 Students Earn Honors

Senior Tapline children, attending senior staff schools in Saudi Arabia, have been placed on the Honor Roll for the 1959-1960 scholastic year. Each received Albert A. Lawandaos and Atnel B. Touma, who joined the Badanah Base Hospital staff as their respective pastimes, Mr. Touma having already joined the station’s newly organized soccer team.

Welcome also to nurse Madde Scaghe, who arrived here for assignment at the Base Hospital. Spending her fourth summer with Tapline, Miss Scaghe has been related for a three-month period. Calling Aleppo, Syria, home, she is a faculty member of the Beirut College for Women. Last month, she obtained her Master’s degree in philosophy from AUB. Such just of her duties was “Serve Philosophical Aspects of Medical Theory in Health and Disease.” We can strike a more pleasant note in this month’s commentary due to the recent death of our Community and Store Clerk, Abdullah Moussa, who passed away by all the government officials and company employees who attended the funeral on Saturday morning, May 26th by Station Superintendent J. R. Terry and R. E. Marth, Company Representative at Tapline’s Pipelining Area, in honor of His Highness Amir ‘Abd Allah and ‘Abd al-A’zim ibn Musa’id, Amir of the Northern Frontiers. Superintendent and Mrs. Terry also hosted Mr. Highness in a private dinner at the station.

The average BPD received at Sidon during the month of June was more than 268,000 barrels below the record. Daily throughput of the pipeline was 204,906 to 231,451 during the month of June, while the average barrels per day loaded reached a new all-time high of 211,972. The average BPD loaded on ships during June in- turned to the players of the five hundred Saudi Arab employees become better off E. J. Rigter, back to her nursing duties from a hop over to Jordan and Lebanon in Mina Haya’s Alfa. Effective July 15, J. J. Senus- senus assured the duties, responsibilities and signature authority of Station Relations Representative—Badanah.

Just under the organization of a soccer club at the station and the delivery to the players of shoes and uniforms, ordered by Superintendent J. R. Terry, Badanah’s sports-minded employees were eager to learn about the transfer of one of their most active members to Rafha. There Sheik Siddiq will assume the job of Assistant Relations Representative.

Vaccination are over for M. Ali Saqqaf, A. Heddi Muhammad, Jaimo’s Fahed, Nasser Muhammad and Haj Manamak Siddik. Aside from holding regular parties and reception, sponsored by all special holiday activities at the station and welcoming ceremonies at bar and coffee gatherings, members of the Badanah Women’s Group found time recently to engage in phil-