

Refinery saves fuel.. Process energy team

"The President has requested that industry reduce its fuel consumption by ten percent? Well, he's almost a year behind the times as far as Shell and Wood River are concerned. We've been working toward that goal in a concentrated way since December, 1972."

Paul Berney, staff engineer in Engineering Office, emphasized his point by opening Shell's 1972 Annual Report. . . there it is in black and white on page seven; Shell's declaration of that goal.

Energy Conservation Team

Paul heads Wood River's Energy Conservation Team/Process which was formed in December, 1972 as a part of Shell's company-wide program to reduce energy consumed in operating the business. Other members of the team are Chet Brooke, senior engineer in Technological, and Phil Belanger, staff engineer in Utilities.

Paul continued, "The search for ways to reduce fuel consumption has been going on much longer than just this past year, though. Like, from the birth of the company. It's a matter of economics. If you want to remain competitive in the marketplace you learn how to make more product for less.

"In the refining business, fuel is one of our biggest cost items, so naturally we have been, and continue, to look for ways to use less fuel while making more product. When you pretty much have been doing everything you can already to save fuel, it's hard to come up with another ten percent. I'm only familiar with Wood River, but I do know we are making good progress toward our goal here."

Although the committee has had brain storming sessions to try coming up with new ideas for energy savings, its main function is to act as a conscience for others, soliciting suggestions and seeing that the appropriate experts evaluate their potential.

Example of savings

Significant fuel savings have been made in Distilling where a series of process changes enabled the shutting down of three columns at Distilling No. 1 while still maintaining Distilling's overall process capabilities. This saves an annual equivalent of about 100,000 barrels of

fuel without an additional investment in equipment.

Process changes at the Kerosene Hydrotreater No. 1 (KHT-1) in Aromatics likewise eliminated the need for one column with a resultant annual equivalent savings of roughly 20,000 barrels.

Technological, acting on a suggestion, studied the hydrogen partial pressures at Hydrodesulphurization Units 1 and 2 (HDU-1 and -2) in Aromatics, and determined that a change in the amount of hydrogen being circulated in these units could be made without materially affecting catalyst stability or product quality. Estimated annual equivalent savings of 30,000 barrels was the result -- again without monetary investment.

According to Warren Saunders, refinery superintendent, the equivalent savings Wood River Refinery has reaped from these adjustments and others completed or now in the mill could heat about 40,000 average local homes for a full heating season.

A job for all

Committee members Chet Brooke and Phil Belanger are positive in their assessments of the program thus far. Chet said, "After a suggestion has gone through extensive evaluations and implementations, it isn't always easy to recall what person or persons first came up with the idea. But I do know that people from virtually every department have made contributions."

Phil Belanger said, "Technical brain storming and slide rule evaluations are integral parts of any energy conserving program, but without the full cooperation of the operators running those units and furnaces, the potential would rarely be achieved. The savings have been good, thanks in part to the cooperation and skill of operators running the units and craftsmen completing the suggested modifications to existing units."

Although significant savings have been achieved to date, the Energy Conservation Team and Wood River's efforts in this regard will continue indefinitely.

Saving energy is everybody's business. If you have any ideas on how additional savings can be made from an operational standpoint, bring your idea to your departmental management's attention.

Canteen serves up 25 years

Canteen Corporation celebrated its 25th anniversary of serving meals to Wood River employees Thursday, December 14, by whipping up a special menu and offering complimentary cake, candy and cigars.

Bernice Davis, chef manager of the cafeteria, has been here all of those 25 years and more. Bernice started in January, 1942 with the food service company which preceded Canteen. "I started in at the ground level," said

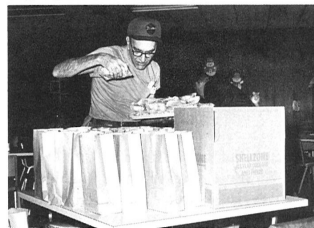
Bernice, "mopping the floors." Bernice has been chef manager since 1963.

Canteen (at that time called Nationwide Food Service) was contracted in 1948 after the death of the previous company's owner. Currently with a staff of nine, the cafeteria serves about 300 meals per day.

The cafeteria is open from 6:30 a.m. to 7:00 p.m., Monday through Friday, but has someone on duty until 1:00 a.m. to prepare overtime meals.



ANNIVERSARY. Long time cafeteria employees join Canteen district manager, Jack Schlobohm, (2nd from left) in the celebration. From left: Hazel Guthrie, Mr. Schlobohm, Bernice Davis, Dorothy Pigg and Jr. Self.



THIRTY-EIGHT TO GO. Bill Leonatti, tester helper in the Refinery Lab, puts together 38 special menu lunches for return to his fellow labmen.



MERRY CHRISTMAS! Although it is known this picture of the Shell Christmas Party was taken several years ago, we're not sure exactly when, or who the two little boys are. The happy chap with the whiskers looks vaguely familiar, though. FOR A PICTURE STORY OF THIS YEAR'S PARTY, SEE PAGE 4.



Review

Wood River, Illinois



VOL. 36, NO. 11

WOOD RIVER REFINERY

DECEMBER, 1973

Energy conservation includes nonprocess

Have you noticed the decorative lighting around the refinery is no longer being used? Unless you were one of those early birds trying to find his way to the refinery in the fog a few weeks ago, chances are you hadn't.

The elimination of unnecessary decorative lighting is but one way in which the refinery is attempting to reduce energy consumption from a nonprocess standpoint. (See also on this page the story of how the refinery is striving to save energy in process areas.)

Energy Conservation Team

In an effort to formalize and increase the refinery's efforts in this regard, an Energy Conservation Team/Nonprocess was formed in early November. The team consists of Ray White (chairman), Treasury; Ralph Elliott, Engineering Field; and Jim Grizzle, Safety.

One goal of this team is to help create a spirit of energy conservation within all individuals and departments in the refinery. The team assists departments in assuming the initiative in energy conservation and in reviewing areas of potential energy savings. All studies are made with the goal of saving energy without sacrificing the safety and security of individual or plant.

As with the efforts in process energy savings, the desire for reductions in energy use non-operationally will continue indefinitely, and this team in one form or another will continue. The first group of projects initiated by this team is expected to be fully undertaken by February. Other energy saving projects are now being sought.

Examples of savings

Already, substantial savings have been made. Many of the changes have been subtle (like the dousing of decorative lighting) and people haven't even noticed. Others, although more noticeable at first, are now taken for granted.

For instance, on the average the use of lights has been reduced about 25 percent throughout the refinery. This has been done by eliminating interior and exterior lights which really didn't contribute to safety, security or help employees perform their jobs.

Facilities not in use for certain periods--such as offices on weekends--are having their blower motors shut off, since it is wasteful to circulate air in an empty office. Even when Indian Summer brought some warmer work days this fall, the temptation to turn on the air conditioners was passed up.



TELEVISED COVERAGE. Paul Berney (left) and Warren Saunders (right) took television newsman Sandy Gilmore through the plant to show him specific projects where Wood River has saved fuel. Sandy and Warren then taped an interview which was later shown on KMOX-TV.

Thermostats have been lowered for the winter. No studies have been made on whether or not the consumption of coffee has increased, but a quick check with the refinery nurse revealed no particular increase in the incidence of colds. Everyone must be adjusting well.

Hot water temperatures in wash rooms have been reduced from their previously "very hot" levels to more normal, usable temperatures. People generally mix some cold water with the hot when washing anyway, so why keep the hot water at needlessly high temperatures? This reduction saves hot water heating fuel.

Studies continue

Other areas are currently under study or in the process of being implemented. The use of steam increases during the winter. Steam leaks are a loss of this energy form. Departments are encouraged to be alert to steam leaks and to have arrangements made for their repairs soon after discovery.

More efficient use of automotive equipment by the refinery is a potential area for savings. This includes better planning, the avoidance of duplicate efforts, and the elimination of unnecessary trips. Under study is the refinery bus schedule and a program to encourage employees to catch the bus for intra-refinery trips rather than using a "one person vehicle".

Saving energy is everybody's business. If you have any ideas on how additional savings can be made from a nonprocess standpoint, bring your idea to your departmental management's attention.

Friends look to you, expert

There probably isn't a single employee in the refinery who hasn't been approached by a friend or acquaintance for the "real facts" about the gasoline or heating oil shortages or the energy situation in general.

As employees at an oil refinery it isn't unusual for those outside the industry to seek accurate information from us. Our opinions and explanations on energy subjects are strongly considered.

It is therefore important that we be knowledgeable of the facts leading to the energy situation and in the current developments of it. To help provide this knowledge, the *Review* has, and will continue to, run articles giving background information and facts about the energy situation. One such article is on this page.

In addition, Shell Head Office has developed six in-depth studies and forecasts on various aspects of energy. Persons interested in one or all of these studies may contact the *Review* editor for further information.

Bill Gibson, editor

ANNIVERSARIES



Jim Loftis
Purchasing
30 years



Clay Romani
Dispatching
30 years



Ray Wright
Engineering Field
30 years



Bill Klokkenga
Hydroprocessing
25 years



Red Snyders
Engineering Field
25 years



Bob Woods
Light Oil Processing
25 years



Paul Zerlan
Engineering Field
25 years

Sports and shorts

United Fund

The United Fund campaign at the refinery has been completed. Approximately seventy-five percent of the employees solicited made contributions. Greater contributions per donor enabled an increase of \$1,075 over last year's amount. Over 99 percent of this year's goal was achieved. Total contributions of \$27,760 is a refinery record.

Son made plant manager

Gary Best, son of Donnelly Best, operator 1st in Alkylation, has been named plant manager in the Calsicat Division of Mallinckrodt Chemical Company. The plant is located in Erie, Pennsylvania. Gary has been with Mallinckrodt since 1965, and holds a B.S. degree in chemical engineering from the University of Illinois and an MBA from SIU.

Biggest catches

Winning anglers for the biggest catches of the year in the fishing contest were: Bass, Jack Ridinger, safety inspector; Crappie, Bonnie Emshousen, insulator; Bluegill, Louie Mor, carpenter.

Annual pensioners dinner

The seventh annual Shell pensioners' dinner was held December 1 at the Lewis and Clark restaurant in East Alton. 224 pensioners attended. Ed Ballman, refinery manager, told the group about current refinery activities and other petroleum industry information in general. Joe Kennedy was the oldest attending pensioner at 83 and Lauren Weishaupt the youngest. Pop Harvick has been retired the longest of the attendees, 23 years. Ted Maddoux travelled the farthest for the event: from Terre Haute, Indiana.

Some energy answers

The present petroleum tightness was actually a long time coming, even though it may have seemed to materialize in a very short while, D. R. Martin, Senior Advisor-Marketing, said recently.

"As early as January 1970, Shell cautioned on the possibilities of shortages," Martin said. "The point is that not until spot shortages of gasoline occurred at the service stations, not until some schools and offices closed for lack of heat, not until natural gas companies refused new industrial customers, not until governments saw their petroleum contracts unbid, not until independent marketers and large commercial users found cheap-priced supplies dried up, not until just recently did the public and general press grasp the problem."

Martin indicated certain questions concerning the energy situation come up again and again. The following are some of these questions. The answers sum up the best thinking and experience of Shell Oil Company on why we have a petroleum product tightness.

Q: If Shell Oil foresaw the possibility of domestic oil and gas shortages, why didn't you produce more oil?

A: For nearly a decade, domestic exploration and production has been inhibited by government regulations, changes in tax treatment, and environmental constraints. Add to this both direct price controls on natural gas and indirect—or implied—controls on crude oil prices.

These inhibiting forces became stronger just when it was harder and more costly to find and to develop new domestic reserves.

We have to drill deeper, go out farther into the sea waters of the continental shelf and into the Alaskan Arctic. Even the discovery of big new reserves in Alaska has not helped the immediate supply situation.

Q: If domestic supplies are so short, why don't we import more crude?

A: The supply-demand squeeze on crude oil is not just a U. S. phenomenon. We once considered Canada an ample and reliable source of crude. Canada, however, is straining its capabilities and its government recently began to restrict the flow from the country.

Even in the Middle East and Africa, which contain most of the world's reserves by far, there is a movement to restrict production. Crude prices continue to climb. We also are competing with other industrial nations for world supplies. Japan, with its booming economy, is a strong bidder for world crude. Its petroleum needs are growing 12 percent per year!

Q: Now you talk about importing crude oil and refined products. Yet for years Shell and others in the oil industry strongly backed mandatory import quotas. Why did you change your tune?

A: For a long time, there was ample domestic crude oil as well as plentiful supply of crude from the Middle East. Unrestricted production coupled with prolific formations made Middle Eastern crude considerably cheaper than domestic crude.

Shell, like many in the industry, felt that if cheap, foreign crude oil was allowed to flood the United States in unrestricted quantities, domestic exploration, production and development gradually would be further squeezed out. It simply could not compete.

We could not buy foreign crude and store it for a rainy day. The construction cost, maintenance and operating expenses of massive storage facilities over a long period of time would wipe out any savings on imported crude. Purchases of foreign crude would have tied up vast amounts of capital which oil companies or even the Federal Government could ill afford.

Nor could we pump the oil back into formations. Oil is not found in large lakes or pools, encased in a great cavity in the earth. It is found in sands, much like a sponge. It is difficult enough to remove once discovered. Putting it back into a formation would be economically impractical.

We could not 'mothball' the American Petroleum Industry while we lived off of foreign crude. A living industry, once lulled to sleep, does not quickly reawaken upon call.

Beginning in 1970, however, our views on the availability of domestic crude began to alter. Economic disincentives and environmental obstacles cast shadows on domestic oil production. We clearly saw the eventual need for foreign imports. We revised our policies to meet changing times.

Now we know that for the foreseeable future both domestic production and imports must be encouraged.

Q: Why don't you build more refineries?

A: Today everyone wants the products of a refinery, but few want the refinery itself. Despite the energy problem, refinery construction lags. Several refinery expansions have been announced, but the products from these expansions will not start to flow for years.

While I don't agree with this anti-refinery mood, I can understand how it developed. Many people still envision a refinery in the image of long ago. It's like thinking that a wildcat well gushes oil. There is a tradeoff area. Refineries *can* be built compatible with the environment.

Construction of new refineries has also been hampered by big cost increases due both to inflation and environmental production requirements, and by serious doubts about crude supplies.

Q: So what's to be done?

A: We must do everything possible to improve the situation. We must provide the incentives to explore for, drill for, and produce more domestic crude. We must discover more natural gas. We must strengthen contracts for foreign oil. We must build refineries. We must discover alternate sources of fuel, apply new technology to tap tar sands and shale, to turn coal into processable liquids and gases.

We must contract and launch more tankers, aid in establishing deepwater ports, increase our storage capacity. We need more barges, more tank trucks. We must expand our supply system.

Banquet honors sports winners/electees

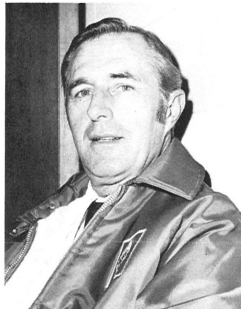
Meet the 10 new SRA Board members



Judy Sasek
Employee Relations



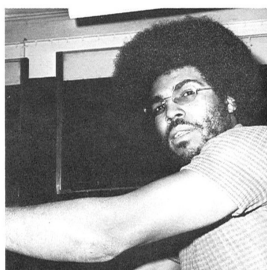
Bob McDonough
Distilling



Charlie Gibson
Engineering Field



Jim Rench
Truck driver



Winston Wallace
Refinery Lab



Dave Webster
Lubricants



Davey Crockett
Pipefitter



Louis Bleier
Truck driver



Marella Zaganelli
Treasury



Charley Rose
Engineering Field

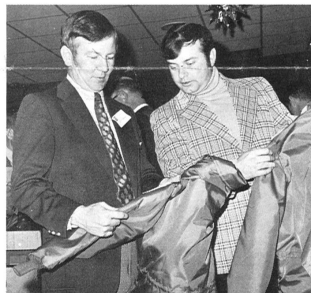
It was a capacity crowd and everyone there was a winner. The annual SRA Awards Banquet was held December 4 at the Lewis and Clark restaurant in East Alton. Champions in team and individual sports and club events were honored and given their appropriate jackets or trophies.

After a buffet dinner, the 1972-73 season winners in events from bowling to bridge, football to photography (and many others) were introduced individually. The group then settled down to an entertaining talk by Ken Daust, promotions director for the St. Louis baseball Cardinals. Mr. Daust offered several personal anecdotes about Cardinal players and coaches and outlined the probable starting lineup for the Card's next year.

Board election

Also announced at the Awards Banquet were the results of an election held the week before for ten representative positions on the SRA Board of Governors. The newly elected representatives' terms on the Board will run through 1975. They join ten current representatives whose terms run through 1974.

The newly elected SRA Board representatives are pictured at the left. Current representatives are Ben Bevfoden, tinner; Barb Black, Treasury; Max Clark, Aromatics; Les Crull, pensioner; Joe Hmurovich, painter; Joe Lanzerotte, Engineering Office; Marg Stroud, Treasury; Ray Thrasher, Engineering Office; Weldon Tucker, Refinery Lab and Henry Vassar, Engineering Services.



AND TO THE WINNERS. Bob Leeson, carpenter, and Roger Romani, pipefitter, admire their well deserved first place jackets.

Car pool it

Across the country more and more people are turning to car pools as not only economical but also convenient and enjoyable ways to get to and from work. In order to assist Wood River employees interested in joining or forming a car pool, a special column has been set up in the *Review* dedicated strictly to advertisements for rides to work (see below). Forms are available at the main and south gates and at Employee Relations for those wanting to place such an ad.



NORTH

Roy Anderson. 116 Mustang Drive, Brighton, Ill. (Thunderbird Lake subdivision, 1½ miles west of Brighton.) Shift worker: vacation breaker. Will rotate driving. Plant phone: 491. Home phone: 618-372-8108.

Jonathan Slaton. 4702 D'Adrian Court, Godfrey, Ill. (D'Adrian Gardens subdivision, directly behind Temple Israel.) Shift worker: No. 13. Will drive, ride or rotate. Plant phone: 838. Home phone: 618-466-7099.

Jim Stone. 107 Kutter Drive, Rosewood Heights, Ill. (Airwood, Manor subdivision.) Day shift. Will ride only or rotate driving. Plant phone: 454. Home phone: 618-259-3247.

Bill Werzner. 716 N. 6th St. Wood River, Ill. (One block north of Rt. 143.) Day Shift. Will drive, ride or rotate driving. Plant phone: 243. Home phone: 618-259-5287.

EAST

W. Haskell. RR No. 1, Edwardsville, Ill. (½ mile west of Rt. 143 on Ft. Russell Road.) Day shift. Will rotate driving. Plant phone: 843. Home phone: 618-656-7896.

Mrs. Sammie Holmes. Rt. 4, Apt C4, Edwardsville, Ill. (Cottonwood Station subdivision.) Day shift. Prefer riding but will rotate driving. Can meet at central Edwardsville location. Plant phone: 335. Home phone: 618-288-5283.

Mike Tracy. Marine, Ill. (2 blocks south of 4-way stop on Rt. 143 in Marine.) Shift worker: No. 8. Will ride, drive or rotate driving. Plant phone: 291 or 285. Home phone: 618-887-4314.

Bill Vargo. RR No. 1, Pocahontas, Ill. (Osage Acres, 6 miles east of Highland.) Shift worker: No. C. Would prefer driving. Plant phone: Refinery Lab. Home phone: none.

SOUTH

Ken Gilley. 17 Lexington Drive, Fairview Heights, Ill. (Capitol Oaks subdivision. ½ mile east of the Rts. 50 and 159 junction.) Day shift. Will ride or rotate driving. Plant phone: 266. Home phone: 618-632-8218.

Ann Robertson. 12 Mercer Drive, Granite City, Ill. (Nameoki subdivision.) Shift worker: 7-7-6 four week cycle, No. 2. Will rotate driving. Plant phone: 308. Home phone: 618-877-0109.

Terry Shipton. 740 N. 78th St., East St. Louis, Ill. (Edgmont area.) Day shift. Will ride or rotate driving. Can meet at some central location. Plant phone: 266. Home phone: 618-397-5243.

Al Sokalsky. 1164 George. Cahokia, Ill. Shift worker: No. 11. Will ride or rotate driving. Plant phone: 387. Home phone: 618-337-4342.

WEST

L.R. Marinucci. 338 Halcyon, Glendale, Mo. (Between Kirkwood and Webster Groves, 1½ miles north of Berry Rd. exit of Rt. 44.) Day shift. Will drive, ride or rotate. Plant phone: 736. Home phone: 314-966-2955.

Louis Swanson. 5517 Era Avenue, St. Louis, Mo. (Near Goodfellow and West Florissant Streets.) Shift worker: breaker. Will rotate driving. Plant phone: 424. Home phone: 314-389-2936.

S.E. Tirrell. 6910 Lakeside Hills Drive, Florissant, Mo. (Adjacent to Paddock Forest subdivision, near Rt. 67 and Parker Rd.) Day shift. Will rotate driving. Plant phone: 227. Home phone: 314-741-4823.

RETIREMENTS



Bob Eckman
Refinery Lab



Hugh Reeder
Distilling



A Merry Christmas party

It *must* have been that merry old man in the red suit and whiskers who brought the snow storm to usher in the holiday season! Shortly after Santa climbed back into his sleigh following the annual Christmas Party, December 18, the white stuff began to fall.

A large crowd of Shell "children" of all ages had just enough time to enjoy a lively program of music, entertainment, candy. . . and Santa. . . at the East Alton/Wood River High School and be bid a safe journey home when rain and sleet followed by the heavy snow hit.

Ironically, the weather wasn't so kind last year when a record ice storm hit *before* and during the Christmas Party rather than after.

As the people filed in the auditorium they were entertained by the lively Christmas rock music of Sunrise, an all girl band from Mercy High School in St. Louis. Russ David's band followed and also provided music for the various acts.

Also on the bill were The Clayton's and their fancy rope tricks, Don Scherrer and his banjo band, and Tom and Sherrie with magic.

Santa rounded out the evening with a stage full of children joining him for a community sing and posing with the kids for pictures by proud parents.

By George, it was a lot of fun!

Review

Wood River, Illinois

VOL. 36, NO. 11 WOOD RIVER REFINERY DECEMBER, 1973

Published monthly for the employees and pensioners of Shell Oil Company's Wood River Refinery and Research Laboratory.

Bill Gibson, editor

SHELL OIL COMPANY
P. O. Box 262
Wood River, Illinois 62095

Bulk Rate
U.S. Postage
PAID
Wood River, Ill.
Permit No. 229