

A Good Job in Production Is Not Enough

By J. H. DUNN, President
The Shamrock Oil and Gas Corporation
Amarillo, Texas

At this meeting you are concerned primarily with the art and science of lifting oil and gas, and with the economics of the procedure. I want to compliment you on the excellent program which it seems will present a wealth of valuable information by outstanding individuals in the specialized phases of this important part of the oil industry operations.

In my remarks today I should like to direct your thoughts briefly to the fact that success and progress in our industry depend upon a coordinated system of integrated activities seeking, but not always maintaining, a balance between production and consumption. I use the word "integrated" with some hesitation. I am reminded of a story that is making the rounds in the South. It seems that with the increasing number of legislative fiat of the Supreme Court, it had been decreed that a restaurant owner could no longer operate his establishment exclusively for the patronage of his white clientele -- so, in order to remain in business and avoid further trouble, he opened his doors to the other race. He soon had his first opportunity to serve a colored lady. In making her wants known, she asked, "Does you have 'chittlins and collards'?" The answer was no. Then she asked, "Does you have hog jowls and mustard greens?" The answer again was no. She said, "Well, then, does you have black eyed peas and sow belly?" The answer was the same. Somewhat irritated and a little disappointed, she then said with finality, "Well, I'll tell you one thing - you ain't ready for this integration."

The industry in meeting its objectives of supplying petroleum products vital to our national defense, our great industrial expansion, and providing products which serve our general welfare by making possible better living, has learned that science rather than art has shown us the way to accelerate the progress. The results, as fantastic as they are, can only be the beginning of greater scientific application for the future.

We must continue to advance in the technology of finding, producing, transporting and refining petroleum and, as well, in the transformation of the raw materials into useful products through petrochemical processes. We recognize, therefore, that a good job in production in itself is not enough. A good job must be done up and down the line. We recognize also our interdependence, one upon the other, in these multiple steps of integration. Let us never forget either that our greatest dependence of all is upon the consumer with whom we may not have a direct business transaction. Nothing is ever sold until it is in the hands of the ultimate consumer, although there is in our case a lot of business to be done along the way.

Many of us take great pride in our classification as independent producers. The term, "independent producer" in our industry means generally that we are free of ties to the great integrated oil companies who carry the raw materials through the various steps to the finished products and, finally, to the ultimate consumer. Whether we like to admit it or not, the independent oil producer is probably the most dependent businessman in the world. He may be doing the best job possible in finding and producing oil and gas, but his efforts are to no avail unless others provide for the continuous flow into the multiple channels for conversion and distribution of the products desired in the consumer markets. Some of us as independent producers have been able to ac-

complish a measure of integration which has made it possible for us to convert our production to a limited extent into useful products, and thereby establish direct contact with consumers and a degree of independence which otherwise would not exist.

The extent of the integration in these cases may be and often is the production, gathering and refining of crude oil and the distribution and sale of petroleum products. Today, that is a small part of the overall integrated system which multiplies the conversion and which has been developed in our industry.

A portion of the barrel of crude oil or the cubic foot of gas which you produce as a raw material may wind up in the furnace of your home, in the fuel tank of your car, truck or tractor, in a jet engine fuel tank, in a diesel locomotive, in synthetic rubber, or in the paint for decorating your home. Not only that, but it could be in the fabric from which your suit of clothes was made or in the insecticides that are used so extensively today around the homes and on the farms. As a matter of fact, the petroleum industry manufactures some 2,350 primary products that are used in thousands of ways to provide the good things in life. We are told that more than 500,000 chemical compounds are found in oil and natural gas.

Such a good job has been done in production that we have been living for some time with an abundant supply of raw materials in a buyer's market. The results have been both depressed prices and restricted production rates below that required for efficiency. This condition has not been all bad. It has forced us to become more efficient producers in order to survive. We have not yet, however, reached the state of perfection in production technique which is to be available to us in the future. We have much more to learn and much more to accomplish.

In order to illustrate some of the objectives of future production techniques, I will refer to an oil property in which my company has an interest. It has been calculated from careful analysis that there exists in place in the reservoir under the leases involved, a total in excess of twenty million barrels of crude oil. Because of the low permeability and other factors resisting the flow, it is estimated that approximately ten percent or two million barrels will be recovered in primary operations. We believe that it will require more than the simple secondary recovery methods reasonably successful in other fields to accomplish, in this instance, results which will bring to the surface any substantial portion of the oil which the reservoir will refuse to give up in primary operations. A program for study and experimentation is underway in the hope that when the primary phase of the operation is completed, we will be ready with an effective plan to produce economically a high percentage of the oil from this reservoir.

Since my start in the oil business the industry has accomplished through production technique many things which seemed in the past impracticable, if not impossible. It has been the inventive genius of men such as are in attendance here who have shown us the way to accomplish more. The benefits to individual companies through exchange of ideas and information made available in industry conferences and forums such as this, have brought about wide and expeditious application of the new developments. So what we learn from

each other applied in a favorable conservation atmosphere developed under a sound State regulatory jurisdiction, has enabled us to move forward as an industry with an outstanding record of progress. As important as these developments have been, it has been said that wisdom is often more important than knowledge and that "know why" can at times be more important than "know how".

We have seen the markets for our products rise by more than 70% since World War II. Our industry is a free economy through competition with unbelievable expansion of markets has met every need until now. We have been told that probably the greatest factor in the victories of two world wars was an ample supply of petroleum products.

Now while we seem to be swimming in a sea of oil, we must continue to progress in production and even so we must plan ahead to maintain an ample supply for the ever-increasing demand for our products. The size of the effort must increase with the size of the demand.

A good job in production does not in itself insure the future. Neither does a good job in manufacturing and the other steps of integration separately or collectively insure the future of our industry.

We must recognize that the greatest threat to our future and, therefore, the welfare of the consuming public comes from those who tell themselves, and all others who will listen, that our system will not work anymore and that big government can best serve the needs of the average man and contribute to his security and welfare. The only real protection against these sinister forces is through an informed public and there is where we have accomplished the least.

Because of the record of service that our industry has maintained through the years, the average citizen has not yet thought of the possibility that the industry will ever fail to meet his requirements. If he thought that interference with the free working processes would impair his supply and service, then we would not need to worry about the things which most concern us today. For the reason that the consumer has not been concerned for the future continuity of supply at reasonable prices, he naturally has not yet been too disturbed because the industry seems to be surrounded by advocates of governmental supervision and control.

As impressive as the job that is being done in the production of oil and gas, we must recognize that it is only the beginning of the importance of the oil industry to the State and to the Nation. When you add to the business of production the business of refining, manufacturing of petrochemicals, processing of gas, transportation, distribution and retail marketing of products, you begin to appreciate the importance of integration, especially to the real beneficiary who is the consuming public. Texas alone has fifty-six thousand miles of oil pipelines, exceeding state highway mileage by 8,000 miles. In Texas there are over 24,000 miles of gas pipelines, and yet, one-twelfth of all Texas rail tonnage is made up of petroleum products. There are 44,400 Texans employed in drilling, 60,700 employed in oil production and 45,000 employed in refining. In these three categories alone there are 150,100 people employed with an annual payroll exceeding \$1,190,000,000. These figures do not include the many thousands engaged in transportation and marketing of petroleum products or the many others in the petrochemical industries and related activities.

The oil industry in Texas pays 69% of the State business and property taxes. The industry pays 48% of the cost of public education, 38% of State old age assistance cost and 45% of the State expenditures for higher education. The industry acts as tax collector for both the State and Federal government collecting from the consumer, the state and federal gasoline taxes which in Texas, being at about average levels

for all states, now amounts to eight cents per gallon.

The Chase National Bank made a study and review of 34 oil companies for 1955 and reported many interesting facts. Among other things, they found that these 34 companies paid taxes charged to income of \$1,700,000,000 and collected for governmental agencies from the consumers, such as gasoline taxes, an additional \$3,119,000,000. These same companies experienced an increase in expenses of \$1,611,000,000 over the previous year, resulting from expanded operations, higher costs of materials purchased, general wage increases and larger outlays for exploration and research activities. In the year 1955, these companies charged off \$373,000,000 to replace obsolete equipment and for dry holes and lease abandonments. For each gross income dollar received in 1955 by this group, 71.8 cents were absorbed by operating costs and expenses. 10.4 cents were required to provide for depreciation, etc., and 6.8 cents for taxes. Of the remaining portion of the gross dollar, 4.8 cents were paid to stockholders as dividends and 6.2 cents were reinvested in the business. We do not have such figures as I have just given you for the industry as a whole, but you may consider them, however, as being representative and the total comparable figures for the industry would be astounding. Reference is made to them in order to indicate the great importance of our industry to the economic welfare of this country.

It is not, therefore, the fact alone that our great industry makes possible so many of the good things in life, which we are unwilling to give up, that makes our industry's welfare and progress so vitally important to the average man. The rest of the package includes the tremendous contribution to the economic welfare of all of the people through jobs created, taxes paid, taxes collected, royalties to landowners dividends to stockholders and opportunities to small business as well as to large business.

Our industry has the greatest story to tell of any industry I know, but while you men in production have been preoccupied with the momentous and absorbing tasks for improvement of technique and those in manufacturing have been busy in the equally momentous and absorbing tasks of providing more products and improving quality and others in our industry have been busy serving the public, our critics have also been busy deceiving the same public with slanders against us. Ours is not just a story of service and progress, it is a story of romance and adventure. It is a story where many have gambled and lost and others have won through perseverance and hard work. The oil industry is not the place for young people who do not believe in hard work and adventure and whose chief goal in life is security.

If the public is to appreciate our industry for what it really is, every man, every member of every segment of this business must take it upon himself not only to tell the industry's story but also to behave himself in such a manner that no act or word of his can be used to damage the industry. Wherever an oilman goes, whatever he does, in the eyes of those who are watching, he is the oil industry. If he is guilty of a misstep or any action that can be made to look like a misstep, the whole industry will suffer. We must seek public understanding and support with the same dauntless vigor that has served us so well in seeking oil and developing and supplying markets.

So I say to you men who are here for the Fourth West Texas Oil Lifting Short Course that although it is necessary that you continue to do a good job in production, it will not in itself be enough. The industry of which you are an important part must demonstrate the vision, leadership, long range planning, faith in the future, win and deserve the confidence of the consuming public and then only the combined effort may be enough.