Your IOGA

In this edition of *The Play* I want to expand on my prior statement that we need to drill more wells in the Illinois Basin if we want our industry and the IOGA to prosper. New production is the life blood of any area.

By drilling more wells we should produce more oil which in turn will increase revenue, service company sales and rebuild our employment base. These things make a strong local oil industry. It's fundamental-even the title of this publication, *The Play,* substantiates this claim.

I have compiled a group of four statistics that will illustrate my points. Jim Coffroth with Scout Check provided me data on active rig count and Scout Check completion tickets. I've compared this information to annual production and the price of oil.

Drilling data was not available, but the completion tickets (oil wells, injection wells and dry holes) are a good barometer. The data does not lend itself to an easy analysis with obvious conclusions. The only clear conclusion is that when the price goes very high the number of active rigs increases also. Other than that, there is no strong correlation between the price of oil and production or completions.

I examined five year intervals starting in 1990 and averaged the annual oil price in the Tri State, the annual Illinois production, the weekly Tri State rig count and the number of annual Illinois completions. I chose these specific intervals because they correspond to historic oil price patterns.

The years 1990 through 1994 establishes somewhat of a base line. Those years are characterized by the lower price coming off the sharp decline experienced worldwide starting in 1986. (The first half of the 1980s were boom years and do not fit into this analysis.) The years 1995 through 1999 represent the lowest point in oil prices before starting the upward trend over the next fifteen years, 2000 through 2014. Finally, the years 2015-2019 are characterized by a return to lower prices. The data is presented in the table.

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One thing that is interesting is that despite the large increase in oil price from 2005 through 2014, production did not increase during those two five year intervals. The yearly data shows a couple very slight increases, but overall production declined.

This is surprising given that the price of oil went from $26.66 for the interval 2000-2005 to $84.66 average in 2010-2014. The rig count went up slightly during these golden years as did completions, but nothing as dramatic as the increase in the price of oil.

Why is this? How do you explain this trend which is counter intuitive? It is not due to economics because yardsticks such as rate-of-return and payout are better given the higher oil prices. The average annual price from 2005-2015 was almost $70 per barrel versus $22 between 1995-2004. What has made the Illinois Basin an attractive place to drill (shallow depths, multiple pays, no severance tax and decent reserves) has not changed.

So what has changed? First, there are fewer active exploration geologists, particularly independent geologists. When was the last time a geologist showed you a prospect? The number of drilling deals coming across most people's desk has decreased. Many petroleum geologists have taken company jobs or switched careers This trend started in 1986 and hasn't stopped in the Illinois Basin despite a nationwide increase in geologists when oil prices were up. Exploration is more risky and more costly than development drilling, but offset and step out wells are also down. The decision to drill a development well is often management driven. So why are these numbers down also?

continued on page 4

continued from page 3

Obviously, fewer exploration wells result in fewer development wells, but it's more than that. One explanation is that many operators have an aging working interest owner base.

Older non-operators are less interested in taking the drilling risk. And unfortunately these working interests are sometimes inherited by people not familiar with the oil business and see drilling as an expense and not as an opportunity.

To resolve this situation, operators should poll partners to find out "who's in and who's out". Those partners unwilling to participate should have the opportunity to sell. I realize that different ownership may require another tank battery or production allocation which are not great solutions, but they are better than doing nothing when an investment in drilling is justified.

Another reason development wells don't get drilled is because the operator owns too much interest. Over the years an operator often winds up with more working interest than they are willing to risk on drilling.

To get around this problem the operator can sell down. If you own half, sell down to a quarter. If you own a quarter, sell down to an eighth. This strategy not only reduces an operator's exposure, but helps finance the drilling.

Finally, generating a drilling prospect and raising the money to drill takes expertise and time. Putting together a professional looking package and getting it sold requires a certain set of skills. However, good deals sell easily. There are plenty of people and companies looking to invest and many are eager and will pay a premium or the promotional cost associated with a new deal.

This leads to the other topic that I also touched on at the end of my last column: the need for new blood. Our local industry must have the people to make prospecting and drilling for oil happen. Young professionals and a trained work force is the key. This is a whole other topic and one that I hope to address in the next issue of YOUR IOGA.

~Robert Stewart
IOGA EVP

PERIOD	TRI STATE ANNUAL PRICE	ILLINOIS ANNUAL BO/DAY	TRI STATE WEEKLY RIG COUNT	ILLINOIS COMPLETION TICKETS
1990-1994	19.00	51,068		710
1995=1999	16.90	36,855	14	377
2000-2004	26.66	30,038	17	309
2005-2009	49.11	26,433	21	385
2010-1014	84.66	25,732	19	405
2015-2019	46.00	23,852	7	398