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Twilight for Oil?

Matthew Simmons, Chairman, Simmons & Co. International

By **SANDRA WARD**

SINCE PUBLISHING *Twilight in the Desert: the Coming Saudi Oil Shock and the World Economy* this past summer, and touching off one of the great debates of the early 21st century, energy banker Simmons has been squarely in the spotlight. Simmons argues that Saudi oil fields, contrary to reports, have been in decline for some time, and he views skeptically Saudi claims that it can adequately boost supply to meet accelerating demand. Simmons, who has headed the Houston-based energy investment banking firm Simmons & Co. International for 30 years, is no stranger to bold calls and controversy. His vision of higher energy prices through much of the 'Nineties never really materialized, for instance. For why it's different this time and oil could be headed to \$200 a barrel by 2010, give a read.

Barron's: The premise of *Twilight in the Desert* is that Saudi Arabian oil reserves aren't enough to meet demand and oil prices are going to skyrocket. How did you reach that conclusion, and any second thoughts since you wrote the book?

Simmons: In about the second week in May I made the last changes to the book. I wondered if I could have made a mistake, and yet I felt as confident as if I was a lawyer and had just submitted my papers to the Supreme Court that I couldn't have made a mistake. The data was too compelling and it was the Saudis' data, and judging from the unbelievable knee-jerk negative reaction, I clearly hit a chord.

But your position has been controversial.

The very best criticism -- the most detailed and the best written -- was called "Another Day in the Desert" and was written by a very highly regarded firm in Calgary. But where they went wrong was their assertion that my claim is Saudi Arabia's oil is about to go into a sudden and irreversible production collapse. That's wrong. The summary of my book is the myth that the oil fields could grow forever is false. There is a lot of evidence that each of these key oil fields are very mature and we should start to expect their decline. An analysis of papers from the Society of Petroleum Engineers form the basis of the book. They provided a massive paper trail over three decades of how these oil fields were getting more and more mature and having a tougher and tougher time.



People don't dispute we have reached peak oil production in Saudi Arabia. But they disagree that it is a crisis because advances in technology and other countries' reserves will offset any decline there.

It is a great thesis but there is no data to support it. The book actually is full of praise for the fact they are using the single best technology known to man to fight these problems. It is just that the problems are bigger than the technology. It was the basic understanding of modern oil-field technology that led me into becoming such a worrier about the decline in



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Simmons' book warned that the world's "key oil fields are very mature and we should expect their decline."

rates we were creating through the technology. I've taken big issue with the major oil companies, who have talked for the past five to seven years about how they were going to finally start growing their production. They weren't looking at their own numbers. The technology is basically making oil and gas come out of the ground far faster than we could ever do before, and it's creating decline rates of 30% a year when it used to be 3% a year, and it is not recovering vast amounts of additional oil.

The Saudis' response to your concerns has changed, hasn't it?

They have dropped what was a very loud critical campaign. As recently as May they said they could produce 15 million barrels a day for 50 to 75 years. Now the claim is we can develop 12-to-12½ million barrels a day by 2009 by doing five new projects. But the projects won't happen for several more years because they can't get access to enough drilling rigs. The projects they are talking about are very technically demanding projects. They are coming to the end of the very, very highly productive parts of these fields, and they are turning to parts of the fields where the oil comes from rocks that are far tighter and where you need a lot more intense drilling and a lot more intense water injection. They are just starting to go out to bid on the most ambitious of the new projects, the Khurais Field, which is a field that is potentially going to produce 1.2 million barrels a day in 2009, half their new supply. The new cost estimates are \$11 billion, and one of the big costs are two massive parallel pipelines coming from the Persian Gulf to inject about seven million barrels of sea water a day into the field to get 1.2 million barrels of oil out. So it gives you a pretty good snapshot of the intensity of these new projects. The risk they don't produce that much is high.

Can the Saudis keep their current production where it is for quite a while? That is certainly a likelihood. But there is a real but unquantifiable risk that it starts into the same type of decline we've seen in the North Sea. It is utterly obvious the North Sea oil peaked in 1999. In 1995, after a few hours of analysis, I made a presentation in Aberdeen saying with almost total certainty the North Sea would peak between 1998 and 2000. Yet the 10 major oil companies operating in the North Sea were confident the North Sea would not peak until 2010. They estimated by 2000 the U.K. and Norway would be producing 7.3 million barrels a day: the U.K. at 3.6 million and Norway at 3.7. It turns out in 1999 the U.K. and Norway produced just under 6.1 millions barrels a day, and by this summer they are estimated to be down to about 3.5 million barrels a day. You are talking about the most technically advanced oil companies in the world looking at their own fields and getting mesmerized by modern oil-field technology, and the mesmerization turns out to be a myth.

Yes, but does that hold true for other areas such as, say, Nigeria?

It holds true for every area with the exception of heavy oil and unconventional oil. It takes a lot more to refine them, and also they just don't come out of the ground very fast. There's less of a likelihood of production declines with heavy oil because you can't get it out of the ground fast enough to have a production decline. A perfect example of a really heavy oil field is one of the top 10 fields in the United States: the Midway-Sunset Field in Kern County, Calif. It was discovered in 1888 and is producing about 100,000 barrels a day, and it probably will for about another hundred years. But it is a massive steam-injection mining program.

What about the argument that demand will adjust to meet supply?

The likelihood of demand stopping is zero, unless we have a bird-flu pandemic. Demand is still accelerating. For the top 25 emerging markets, GDP [gross domestic product] change year-over-year is averaging up 5.5% for 25 countries. Argentina is 10.1%. Chile is 5.2%. China is 9.4%. Hong Kong, 8.2%. India, 8%. Indonesia, 5.3%. Malaysia is 5.3%. The Philippines is 4.1%. Singapore is 6%. Embedded in that is a continuation of an inexhaustible increase in the use of oil, particularly in the countries where they are barely using any oil. The wealthier they get, the faster they start using oil. The idea that \$60 oil is really hurting the emerging economies is a myth. It doesn't seem to be affecting them at all. The Energy Information Administration numbers that came out recently showed the U.S. crossed 22 million barrels a day of petroleum use, a brand new record. So it is not stopping the U.S., either. To everyone's surprise, the economy grew by 4% in the third quarter, even with the hurricanes. That was when we had almost \$65 oil.