## Global E&P and drilling activity outlook is bright, even with lower commodity prices

**THE OUTLOOK IS** bright for global E&P and drilling activity, with many prognosticators and analysts saying pent up US demand could result in as many as 200 additional rigs, perhaps more.

It may take the industry 12 months to meet that demand with additions to the rig fleet. Additionally, most expect that number to continue to grow beyond 2006.

This pent-up demand could result in a rig count as much as 15% higher than current figures with continuing rig demand meaning continuing high dayrates, onshore and offshore, worldwide.

Globally, these analysts expect international E&P and rig demand to also continue increasing, with strong activity to continue in Africa, Southeast Asia, Brazil and particularly the Middle East, which has already experienced phenomenal growth in E&P activity the past 12-15 months.

There are caveats, however. While the US and most world economies have been coping with high oil and natural gas pricing, it is important prices not become so high as to slow demand and in turn slow the economy. This has been seen with gasoline pricing in the US.

One analyst said that if natural gas prices go much higher, there is an increased risk of a recession. On the other hand, should commodity prices drop too low, they could impact E&P levels and drilling activity could decline. However, all believe that even with lower oil and gas prices there could still be an increase

in drilling activity but at a slower rate.

CONTINUING UP CYCLE

Robert Ford, Senior Vice President and Senior Research Analyst for Sterne Agee & Leach in Houston, believes the strong E&P and drilling activity cycle will last at least another three years based upon the time estimated to resolve three important market issues. These three issues will have to be addressed in order to bring hydrocarbon pricing back to its historical relationship with inventory. As a result of the timing necessary to correct the three issues, he said, conservatively the current cycle will last another 3-5 years.

Mr Ford noted that the industry previously priced oil based upon inventories. Not so in the present market climate. Today,

Atwood Oceanics' semisubmersible Atwood Hunter is working for Burullus in the Mediterranean offshore Egypt under a two-well contract. The rig then goes to Woodside for a two-year contract.

the industry is pricing from excess capacity, he said, noting that if the industry was pricing from inventories oil would be about \$27 per barrel. In order to return to that level, the industry must correct the excess capacity issue, and that will involve correcting three market issues.

First, the industry must increase the global spare productive oil capacity. "Now there are about 2 million barrels per day of spare capacity," Mr Ford said,

"but there are 6 million barrels a day on any given day that seems to be at risk.

"To meet incremental demand, offset the decline curve and build spare capacity is going to take at least 3-4 years."

The second item to be corrected is refining capacity. Spare oil production capacity is about the same level as last year,

however, oil prices are at least \$20 higher than a year ago. The reason is refining capacity. Mr Ford believes that also will require a 2-3 year fix.

The final factor is LNG. Mr Ford said LNG is more a US issue, although LNG demand is increasing globally. "In the US," he said, "we have increased the gas directed rig demand during the past decade by more than a factor of three, and we are working on quadrupling it, but gas production really hasn't changed."

He said the LNG issue is another three year period for correction.

Mr Ford isn't the only one mentioning lower oil prices for the good of the E&P market and the global economy. Jim Wicklund, Managing Director, Research for Bank of America Securities, said the market has already proven in the past year that \$50 oil doesn't negatively impact the economy, and at that price level drilling activity would likely continue to increase. Mr Wicklund also said there would be little impact to the fundamentals of international drilling activity even with oil at \$40.

"Drilling activity would probably still increase, but at a slower rate," he said. "At \$40 oil, international drilling activity would increase closer to 3%-4% rather than 8%-9%."

Dennis Smith, Director of Corporate Development for Nabors Industries, agrees that the industry will continue to see growing rig demand for a number of years. He also agrees that during the past decade the industry has tripled the num"I think that kind of rig intensity per Btu equivalent is beginning to replicate internationally for oil," Mr Smith said.

He said there will be more oil found but the same trend as natural gas exploration is beginning to occur internationally with the complexity of horizontal and multilateral wells to develop mature oil fields and gas fields in the US.

"The intensity of effort and the number of rigs it will take to sustain production and grow it significantly is going to remain at

that high level for some time," he explained. "With that background, we think rig demand is on the order of (another) 250 rigs per year."

## RIG DEMAND

Many analysts and drilling contractors believe that the global land rig count could move up as high as 15% in 2005, with possibly another 8%-10% increase in 2006 and with more modest increases in 2007 and beyond.

Mr Ford said the global land rig count averaged 2,389 rigs in 2004 and he believes the industry could see a 14.5% increase this year, with another 8% increase in the rig count in 2006 and 6% rise in 2007. He notes that the US rig count will increase the fastest.

"I think pent up demand in the US land rig market is between 150 and 200 rigs," Mr Ford said. "If the permitting activity in September is any indication, that number is going to continue to grow."

He believes that if 200 rigs were available immediately that they would find gainful employment within a week.

Mr Ford also said that from mid-October to the end of 2005, more than 50 rigs will be added to the US fleet, including approximately 47 refurbished rigs and eight new units. During 2006 he sees as many as 130 refurbished rigs and 90 new rigs added to the fleet.

The industry could take 9-12 months to meet that pent up demand with new and refurbished rigs, and that means dayrates will continue to increase. For example, at \$8 per mcf gas and dayrates at \$22,000, E&P companies are still get-

ting high returns. At \$10 gas prices, dayrates could go to \$25,000.

However, at what point does the industry decide there are too many rigs and stop adding to the fleet?

"At some point we are going to have one too many rigs in the market and it's going to fall apart," he said. "That is going to be a function of economics and commodity prices, but I believe that with \$45 oil and \$6.50 gas, most of the projects are going to go forward.

"At some point we will add one too many rigs, but at the earliest that is going to be a 2007 event."



Nabors Industries Rig 810 is working for Groupement Berkine in Algeria. North Africa is expected to be among the top E&P plays.

Mr Smith agrees with Mr Ford when it comes to onshore rig demand. "We think rig demand is going to be on the order of 250 rigs per year for a while," he said.

Most of that demand is onshore and much of it will be international rig demand in areas such as the Middle East, North Africa, Latin America, Venezuela and Mexico. Mr Smith's picks for the top three E&P areas are the Middle East, North Africa and the US.

Jeff Tillery, Director of Oil Service Research for Pickering Energy Partners, said he anticipates the US rig count to experience at least a 10% increase in 2005, and likely higher.

"I think the bias is definitely upward and in the neighborhood of 200 land rigs, either newbuilds or refurbished units, added to the fleet from the last half of 2005 and through 2006."

Mr Tillery sees increasing rig demand in the Middle East, particularly Saudi Arabia, which has already experienced dramatic growth in rig activity from around 30 rigs 18 months ago to more than 100 units presently. "Saudi is very serious

about raising their productive capacity," Mr Tillery said, "and they are going to do that with the drill bit with a lot of in fill drilling but I also think there will be more exploration drilling."

In addition to Saudi Arabia, he sees strong activity in the UAE and Qatar, all of which are expected to see very strong incremental rig demand during the next couple of years.

Mr Wicklund sees Latin America as probably the biggest sleeper area. Mexico needs the rigs, he said, but the question is whether **Pemex** will be willing to pay the world competitive dayrate for them, particularly since the US Gulf is extremely tight due to 9-10 jackups knocked out of the fleet as a result of Hurricanes Katrina and Rita.

"Mexico is one area of the world where there could be some potential weakness due to continual budget issues there," Mr Tillery said. "From a tax perspective, Pemex is a huge support of the economy and it tends to have funds pulled away from them.

"We have not seen Pemex willing to let go of offshore rigs yet," he continued, "but we have seen the periodic budget issues affecting onshore more than offshore."

## RIG SUPPLY, DAYRATES

"The offshore markets look to be very tight over the next 18 months," Mr Tillery said. "The newbuild jackups that will be delivered beginning in 2006 will all definitely find a home."

## **GLOBAL DRILLING OUTLOOK**

He also said that the deepwater rig market is extremely tight for the next couple of years, noting that the 5th generation floaters are booked through at least the end of 2006.

In fact, **Transocean Inc** recently reported contract extensions for several of its deepwater and ultra-deepwater semisubmersibles and drillships that begin in 2007 and take the rigs, in some cases, through 2010.

Also, ENSCO International recently signed a contract with a consortium of three independent oil and gas companies for a newly built ultra-deepwater semi-submersible to be named ENSCO 8500. The rig will be built at Keppel FELS in Singapore for delivery in the second quarter 2008.

Revenues generated from the four-year contract with Anadarko, Dominion E&P and Kerr-McGee are expected to total approximately \$385 million against a construction cost of approximately \$312 million. That translates into about \$264,000 per day, a bargain compared with today's dayrates of more than \$400,000 in some cases for ultra-deepwater rigs capable of drilling in up to 10,000 ft of water.

The ENSCO 8500 will be capable of working in up to 8,500 ft of water but can be upgraded to work in 10,000 ft water depths.

Operators haven't yet balked at paying \$400,000 per day for rigs. There probably is a dayrate threshold where operators might think twice about paying \$400,000 or more per day for a rig, but when that occurs is anyone's guess.

The operator's decision to pay a certain dayrate is more of an economic decision that is sensitive to the probabilities of success they assign to a particular well and the prevailing and forecast commodity price. Depending upon the exploration success, high dayrates could continue for a longer period of time.

On the other hand, additions to the rig fleet beginning primarily with jackups in 2006 and semisubmersibles in 2007 and later, could moderate dayrate increases.

The land rig side is slightly different. There is still a threshold, of course, but it may be significantly lower relative to off-shore rig rates.

For example, some operators have already proclaimed land rig dayrates too high in the US and have begun building rigs for their own account.

Mr Smith noted the average cost for Nabors to build a new 1,000 horsepower rig is around \$12 million. The company could refurbish one of its rigs for a cost of approximately \$250,000 to \$4 million, but future refurbishments could increase to as much as \$8 million.

"I think the capacity for refurbished (land) rigs at this point is diminishing," Mr Smith said. "If you have an economic situation where a customer will underwrite a new rig, then that is going to be more a default position.

"There are still going to be existing rigs brought into the market because the cost to do so is reasonable," he continued, "but the spread to reactivate a rig versus building a new one and the willingness of the customer to pay for the efficiencies of the new rig rather than an old rig is narrowing."

Nabors is presently ordering equipment for a number of new rigs as well as presently refurbishing seven units.