

# High worldwide onshore drilling level is sustainable

**ONSHORE NORTH AMERICAN** drilling is effectively at full capacity of available rigs, and this cycle will likely last throughout the decade and beyond with more moderate volatility. Dayrates and margins on domestic land rigs are at their inflection point and demand appears to be continuing at high levels.

That rosy assessment came from **Denis A Smith, Nabors Industries'** Director of Corporate Development, during IADC's 2004 Annual Meeting in New Orleans in September.

## DOMESTIC LAND MARKET

Mr Smith noted that Nabors still has about 65 cold stacked rigs that had been operating at the 2001 peak in activity. About a dozen of them have recently been brought back into service due to increasing demand.

However, there is now a lack of available used equipment that can be used for spare parts, meaning that rigs that once were rebuilt for as little as \$150,000 a year ago now cost 10 times that much.

Of Nabors' 65 cold stack rigs, Mr Smith said, 24 are large 2,000 hp rigs and around 20 are 1,500 hp rigs. "The domestic market for large rigs domestically isn't really strong as yet," Mr Smith explained.

"Customers are concentrating more on the development type prospects and better exploitation of existing reserves and haven't really begun exploratory work.

"However," he continued, "demand for the big rigs is increasing, particularly in South Texas."

As a result, Nabors is experiencing leading edge pricing on land rigs, about \$1,300 per day higher at the end of the third quarter compared to rates the company received at the end of the first quarter.

Mr Smith said the improving market is "sustainable" and mentioned several conversations with E&P companies that say they want to spend as much as another \$30 million as 2004 winds down.

## INTERNATIONAL PROSPECTS

Internationally, Mr Smith believes that

E&P activity is on the rise, especially onshore, with 45-60 incremental rigs working during the next two years.

As many as 30 new contracts have already been awarded since 1 May in countries such as Algeria, Colombia, Ecuador, Egypt, India, Libya, Oman, Mexico, Russia, Saudi Arabia, Venezuela and Yemen.

"We are seeing the challenges to incremental production in this high price environment," Mr Smith said, "and we think there is a good outlook for international drilling for a while to come."

Mr Smith said that there will be sharp increases in E&P activity in the Middle East, particularly Saudi Arabia, where he said the country was struggling to

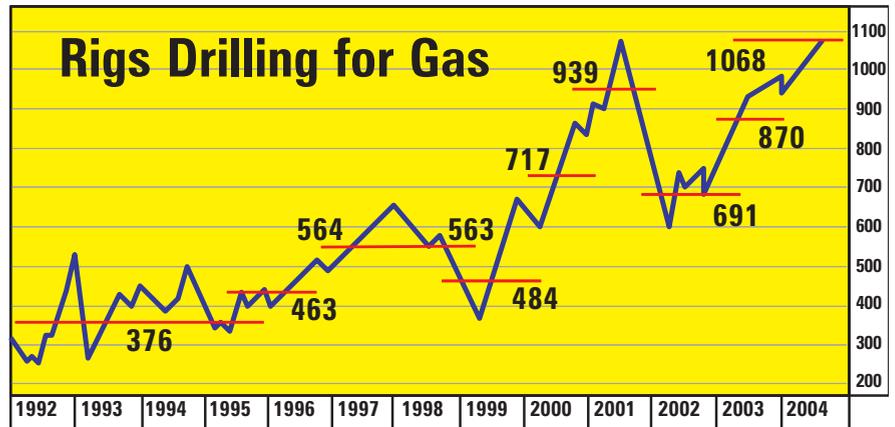
The company operated 16 rigs there in 1994 but began repositioning them to other countries when Nabors felt the market environment began deteriorating.

"We like to brag that we were the first to get to zero rigs in Venezuela," he said.

## SUSTAINABLE UP CYCLE

Mr Smith said the long and more orderly sustainable cycle is good for the entire industry, making it easier for the industry to cope with safety and efficiency issues, personnel, etc.

Customer priorities have changed. The large majors have been more concerned with reserve issues and the accountability of Wall Street on returns as opposed



Source: Baker Hughes

maintain production. For example, he said, **Saudi Aramco** recently increased its oil rig count by 10 rigs to 17 at the end of June.

Mr Smith also noted that Nabors and others are bidding on 11 additional tenders, six of which are for oil exploration.

Additionally, Aramco switched six rigs from gas exploration to oil.

"What that tells me is that when they went to open the valves this spring it just wasn't there."

North Africa is an improving market, Mr Smith said, and Latin America is "so-so", although Colombia is increasing its E&P activity. Venezuela just isn't considered a market anymore, at least as far as Nabors is concerned.

to pure growth, which is beginning to reverse itself, Mr Smith noted.

He also noted that majors have been concerned with global reprioritization of capital and, in conjunction, with rising finding and development costs.

Additionally, particularly in North America, majors have been wrestling with increased prospect complexity and risk in the face of diminishing geologic manpower as prospects become more difficult.

Regarding the cry of no prospects, Mr Smith said that Nabors had discussed the issue with about 50 E&P companies.

"The answer we received without exception from every company was, our industry is really short on prospects but our company is not.



"We were never able to find that one company that was driving down the whole industry."

He went on to say that the industry needs to begin exploring again.

The industry has seen diminished Gulf of Mexico activity on the part of the majors, he said, since it's not as important for them due to the maturity of the area.

"However," Mr Smith said, "the majority of the acreage is owned by the majors and they are just harvesting them, and they eventually will sell them.

"I thought the higher the (commodity) price, the longer they would hold on to the properties," Mr Smith said, "but we have seen a number of transactions this year."

As far as the public independents go, they are optimizing their properties and emphasizing low risk, high return projects and "manufacturing gas".

"Private operators are really hitting the margins and driving things," he

explained, "and we are seeing those companies at a record activity level."

## OIL AND NATURAL GAS

Mr Smith said that North American gas fundamentals are strong and underpin the positive outlook, with supply challenges also pointing to a more orderly and sustainable cycle.

"We have demand of 75 bcf per day in North America and the decline rate is about 20 bcf per day per year. That is a pretty substantial hurdle to climb and that is really what drives the cycle."

He noted that the timing of the supply impact of stranded gas and imported gas is still about a decade away and drilling is the best option for the industry in the meantime.

He also said that oil has had the same dynamics as natural gas but it was less visible. While supply will be increasingly more difficult and rig intensive, there is a significant amount of oil expected to come onstream through the end of 2006 and then new supply will experience a significant decline.

The number of worldwide "mega projects" expected onstream total 11 in 2004 and 18 in 2005 with production from those projects estimated to peak at about 3 million b/d.

However, beginning in 2006, the number of projects decreases to 11 and falls to three in both 2007 and 2008, with production falling to 2 million b/d in 2006 and less than 1 million b/d in 2007 and 2008.

"So 2½ years from now the pipeline dries up and we have got to get back into the exploratory phase in our projects," Mr Smith explained. "All we have been doing is developing and bringing the projects on line."

## CONTRACTOR OUTLOOK

What customers are focusing on today for existing reserves are drilling efficiencies and implementing better technology, according to Mr Smith.

For example, he said, **EOG Resources** is drilling nearly all of their West Texas gas wells horizontally compared with four years ago when the operator didn't drill any horizontal wells in the region.

Mr Smith listed several challenges to

recovering incremental reserves, including deeper horizons, more complex formations with higher risk, and reserves located in more remote and less accessible areas.

Requirements for higher rig efficiency includes higher hydraulic horsepower, increased application of pad drilling, AC powered rigs and improved technologies such as automatic drillers. Reducing rig move time is a primary focus in today's rig market.

"Well cycle times have diminished with better bits, better technology and better efficiency in rigs," Mr Smith explained. "Wells we used to drill in 35 days are drilled in 20-25 days now, so we have been investing in reducing our rig moving times."

He said Nabors has reduced the moving time on its base rigs from 5-7 days previously to 3 ½ days now.

The new rigs the company is building can be moved in 1 ½ days. Nabors is building 11 such units presently.

In terms of US land rig metrics, Mr Smith noted that the industry experienced an effective utilization rate of 100% in August 2000 with 850 rigs.

Today, 100% effective land rig utilization stands at more than 1,100 rigs. Rigs have become more efficient in drilling wells today.

"We are drilling more wells today with fewer rigs but natural gas challenges are causing us to need more rigs," he said.

In August 2001, Nabors reached its rig capacity and other contractors could not feed rigs into the market fast enough, Mr Smith said.

Prices spiked and the company was commanding dayrates resulting in an average margin of \$6,600 per rig. However, pricing collapsed quickly and it has been a long road back.

"We have been eating the cost of repositioning rigs," Mr Smith said, "and we are probably running at \$3,000 or better average margins today, which is about \$750 higher than the second quarter.

"It means they are sustaining and it looks like we will have a nice, orderly straight line [of increasing margins]." ■