

# US land outlook calls for modest growth, steady demand through remainder of 2007

By Richard Mason, The Land Rig Newsletter

## NOT BAD.

Those 2 words describe the outlook for 2007 drilling activity in the US onshore sector. Some may view the term as luke-warm or even negative, although it only sounds that way in comparison with the outstanding conditions that characterized the land market in 2006.

"Not bad" suggests demand for drilling services will be steady in 2007. Rig count, in fact, should be higher in the 4th quarter 2007 than it was in the 4th quarter 2006, possibly 10% higher if things go well. And "not bad" suggests pricing will stay firm, although it will not duplicate the great run upwards that characterized the market last year.

Still, 2006 ended with \$13 billion in direct rig expenditures in the land market, or a little more than \$1 billion/month. It is reasonable to expect total expenditures will climb modestly higher in 2007, perhaps nearing \$15 billion. That's not bad from a gross dollar perspective but may look weak when compared with revenue growth of 35%, 51% and 46%, respectively in each of the previous 3 years.

It appears the froth has left the US land market and, with it, some of the inefficiencies in performance and economics that always lurk around the edges of the drilling industry in very good times. Unlike the previous 2 cycles over the last 10 years, this one is nowhere close to rolling over. If anything, the picture through the rest of the decade remains as vibrant and positive as any time in recent memory.

## FOLLOW GAS PRICES

The bottom line is that US land drilling will follow the fortunes of the natural gas markets in 2007. Just 90 days into the calendar year, it appears gas markets have reset on the storage side with last year's surplus largely gone and natural gas prices well above \$7, which should be interpreted as a positive indicator. More importantly, the futures strip resides well above \$8, which provides hedging opportunities for operators and further guarantees favorable economics for drilling. Even without hurricanes or excessively warm summer temperatures,

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early indications are that the natural gas market will be somewhat tighter as 2007 evolves, and that is good for pricing and for land drilling.

There have been some recent bumps that engendered caution when it came to 2007. The 1st quarter 2007 was beset by flat or declining rig counts, softening day rates, rigs stacking out even as new capacity was arriving in the market, and an expanding level of caution among contractors who previously had been quite bullish.

That uncertainty originated from customers. Operators have been experiencing the impact from lower commodity prices in Q4 2006 and early 2007. A warm winter early on prompted a sudden surge of caution and revised budgets in early 2007 when it came to field activity, which was reflected as either flat or slightly declining rig count. At the same time, a rising tide of new rigs began replacing older units just as demand weakened, creating the first instance in 3 years where drilling capacity exceeded demand for drilling services. Utilization fell, followed by dayrates. Rig rates are down about 10% to 15% versus 2006 peaks, though still "not bad" in a historical context.

While it is a challenge to predict the specifics of things like rig count with any certainty, it is possible to identify some emerging trends that impact rig count. The onshore market is characterized by a growing volume of advanced technology applications as targeted reservoir rocks become more difficult in yielding reserves. These harder-to-obtain reserves, generally referred to as unconventional resources, require horizontal or directional drilling and precision fracture stimulation, downhole techniques that can be a blessing and

a curse. The blessing is the ability to obtain greater amounts of hydrocarbons from ever-more difficult rock. The curse is horrendous decline rates as these same techniques improve recovery rates.

## SANDS TO SHALES

E&Ps have been jockeying for land positions in major unconventional plays for the last 3 years. The trend has evolved from an emphasis on tight sands earlier in the decade into tight shales as the 2005-06 drilling boom unfolded. The land jockeying phase of this transformation is largely finished. The industry is now moving towards exploitation. Consequently, operators are discussing increasing budgets and rig count in a majority of unconventional applications, and these programs will play out over the next 2-3 years.

One key to exploitation of unconventional plays involves control of large acreages with a systematic program of exploitation that relies on repeatability. Operators refer to this technique as gas manufacturing and rely on hedging to underwrite economics for multiyear developments. Operators pursue scale economics to lower unit cost over time. That creates a steady market for drilling services that insulates the sector from the normal vagaries of commodity price fluctuation. Currently about 3 dozen operators account for more than half of rig count, and many of these companies, such as **Chesapeake, Devon, XTO, ConocoPhillips, Williams** and **EOG**, are deeply entwined with unconventional development programs.

At the same time, it is possible to view horizontal and directional drilling as a proxy for this trend, and both nonvertical rig count and footage are gaining market share even as overall footage

continues to rise. Horizontal and directional drilling now comprise nearly 40% of rig count. This is evident in the fact that horizontal drilling went from 25% of Barnett shale wells in 2003 to 75% in 2005 (while total well count rose), and is well above 85% currently. Many operators, such as **EOG Resources**, cite horizontal drilling as a primary component of their future drilling programs.

Meanwhile areas like the Barnett Shale, which is now the nation's most active gas play, have evolved into field laboratories for testing downhole technologies. The result is an expanding suite of techniques and services being exported to other plays like the Woodford Shale or the Fayetteville Shale. This knowledge diffusion has shortened the cycle time in bringing newer shale plays online. In some plays, such as the Fayetteville, the industry has witnessed the advent of operator-owned drilling divisions with fit-for-purpose rigs.

## RIG ADDITIONS

Meanwhile, new rigs continue to head to market. The volume of additions in 2007 will be similar to 2006, around 350. The difference is that most of the 2006 volume involved refurbishments and upgrades with some new construction, while the 2007 trend will involve mostly new rigs (280) with some refurbishments or upgrades. Many new additions are supplanting older equipment, which is either being retired or set aside for better performing drilling units. The net addition to the rig fleet is likely to be much smaller than gross additions because attrition is expected to be at the high end of historic ranges. Most rigs have worked continuously for the last 18 months, and that intensity is beginning to take its toll on iron. Still, the marketed portion of the US onshore fleet could grow by as many as 200 units in 2007.

Two trends that could impact the domestic gas market are the arrival of Arctic gas and LNG. Arctic gas is seldom discussed these days other than as a fuel for extracting Canadian heavy oil reserves, while LNG is going to take longer and arrive in smaller-than-anticipated amounts because of growing global demand. Meanwhile, a potential change in Canadian tax laws plus weak natural gas prices relative to the US has prompted a significant pullback in Canadian gas exports to the US and a lower Canadian rig count.

One can argue that the most recent peak for land drillers occurred about the time of the IADC Drilling Onshore America conference in May 2006. Record numbers of attendees traded tales of rising dayrates, increasing demand for drilling services, and evidence that the land contractor was experiencing the best time in 30 years — if not ever. Ultimately, gross operating margins for the sector topped 50% in the 2nd half of 2007. Rig count reached modern-day highs, and dayrates in the \$20,000 range, or above, were commonplace. The industry had embarked on the largest

retooling effort since the late 1970s. At the 2006 Drilling Onshore America conference, every contractor had a youthful bounce in his step and a sparkle in his eye.

When contractors convene at this year's Drilling Onshore Conference, the mood may be a little less exuberant, but the industry is nowhere near rolling over. All in all, contractors may grow comfortable with an outlook that is, on balance, not bad.

*Richard Mason is publisher of The Land Rig Newsletter. ♠*