

Onshore America: The new E&P frontier

2006 promises to be the best year yet

Richard Mason, Land Rig Newsletter

IT IS THE best of times in land drilling.

The industry has begun a massive retooling effort that indicates land drilling is now a growth industry for the first time in a generation. Rig rates moved above replacement cost economics in 2005 and show no signs of weakening in 2006. Meanwhile, the US land market is surpassing deepwater as the new frontier in drilling thanks to breakthroughs in understanding and exploiting unconventional natural gas resources, which now account for 17% of US natural gas production.

Sure, there are challenges. Skilled hands are scarce, just as the industry is facing a surge in new capacity. And daily operating costs are rising as contractors compete for labor and components in a constrained market. That said, 2006 will be the best year yet in the current upturn, which began quietly four years ago.

Rig count in the 4th quarter 2005 was up 101 percent over 1st quarter 2002. Footage rose by 138 percent during that time, and direct expenditures on land drilling rose 215 percent to \$2.3 billion during the 3rd quarter 2005 versus the 1st quarter 2002 trough.

Watching the frenetic activity in today's oil patch, it is hard to believe that ten years ago the land drilling sector was a victim of declining commodity prices, eroding drilling capacity and an investment drought. Operators promoted "Drilling in the 90s," a business model designed to reduce costs by rationing work among service companies in alliance relationships that guaranteed rig employment, but only to the extent the contractor could reduce overall costs. Technological advances, such as 3D seismic, promised fewer but more successful wells, implying a need for fewer land rigs.

The trends resulted in massive consolidation among land contractors. More than 570 rigs exchanged hands in 1996-97 at an estimated expenditure of \$1.14 billion. All that changed in the last four

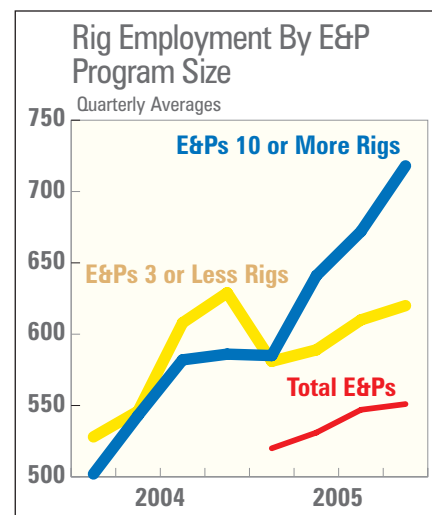
years. Global energy demand overtook supply in the 2002-04 era, and commodity prices responded accordingly. The same is true in North America, where offshore natural gas production has rolled over. Natural gas prices subsequently tripled after 2002, which created a surge of free cash for operators who re-invested the money onshore, the easiest and least expensive venue for generating natural gas to meet immediate demand. That in turn led to a renaissance in the land drilling market over the last two years.

There are other market dynamics at work. As surely as summer follows spring, the drilling industry behaved in a predictable seasonal pattern. Large drilling programs added rigs under new budget money early in the year and cut back by late summer while smaller E&P firms entered the market to complete projects by year's end for lease, tax or investment purposes.

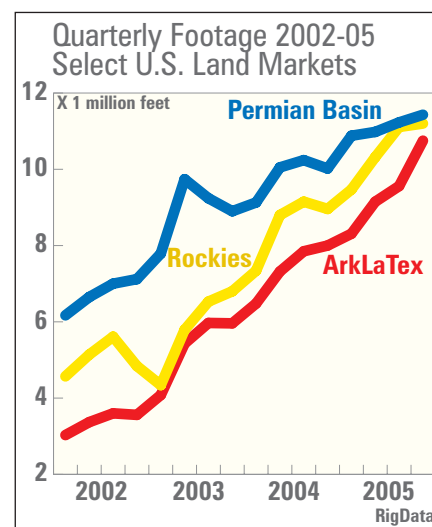
However, that pattern changed in 2004. Not only did the bigger drilling programs, typically large independents, retain rigs, they also increased the relative size of their rig employment programs. When the smaller E&P firms came to the market in the second half of 2004, they found the cupboard bare of available rigs. Day rates responded accordingly to the rush on rigs with a sharp jump in the 4th quarter 2004 and 1st quarter 2005, a trend that has persisted into 2006. Additionally, some of the superindependents who have sizable acreage holdings onshore also discovered they were unable to obtain rigs in 2005, which led to long-term contracts of up to three years duration to finance new land rig construction.

Today's business model should be labeled "Drilling in the 21st Century." Like "Drilling in the 90s," it involves a partnership arrangement between contractors and operators, only this partnership is oriented toward adding the capacity operators need to ramp up capital expenditures in a multi-year cyclical upturn.

Drilling in the 21st century involves the first significant surge of newbuild capacity as the industry enters an extended retooling cycle that should deliver as many as 400 additional rigs to the market over the next two years, including 200 newbuild units.



The above graph shows quarterly averages in total rig count for exploration and production companies employing 10 or more rigs versus companies employing three or fewer rigs. The larger drilling programs, which consist of the large independents and superindependents, locked up rigs in 2005, leaving fewer rigs available to smaller E&Ps. The smaller operators have been frozen out of the rig market.

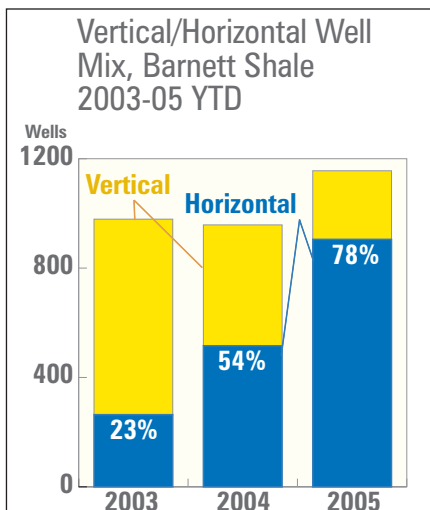


The above shows the change in quarterly footage for the Permian Basin, the Rockies and the ArkLaTex from the trough in 2002-05. Permian Basin footage is up 85 percent, the Rockies up 145 percent, and the ArkLaTex is up 255 percent. The large increases in the latter two markets represent the rapid increase in drilling for unconventional gas after 2003.

Eighteen months ago the odds of finding terms like “newbuild rigs” and “US land market” in the same sentence were slim. Now the major question is how many more rigs will be added to the US market in 2006. Constraints in manufacturing make this a hard number to peg, but it’s reasonable to expect 200 additional rigs in 2006 and a similar number in 2007. Roughly 50 percent of these will be refurbished or re-activated legacy equipment, with the remainder newbuilds.

Many of the newbuild rigs are modern technology units with auto drillers, iron roughnecks, automated pipe handling equipment, and sophisticated communications systems. The units are advertised for their ability to reduce downtime and increase the number of wells a customer can drill in a year. While the rigs entail a 10 percent to 15 percent day rate premium, they are financially competitive in the long run because of high performance, providing customers the ability to bring production on line sooner.

In the scramble to develop new drilling capacity, the industry is witnessing the globalization of rig manufacturing. The US saw the importation of the first all-Chinese rig in 2005, as well as rigs from



The graph at left shows the percentage change between vertical and horizontal drilling in the Texas Barnett Shale. Horizontal drilling accounted for 23 percent of all wells in 2003 but grew to 78 percent of all wells during the first nine months of 2005. The change accompanied the expansion of the Barnett Shale unconventional gas play to the south and west of Fort Worth, Texas, based on improvements in horizontal completion technologies.

Italy and Canada. The US should see as many as 100 mostly Chinese-manufactured rigs in the market by the end of 2007. Chinese-manufactured rigs will account for five percent of the fleet but represent 25 percent of expected capacity additions before demand for drilling services comes into balance with the supply of additional capacity after 2007.

None of this would be possible without the assistance of commodity prices, which have been generous to the indus-

try. The question in the long term is whether prices will stay high enough to support robust energy activity without rising so high as to result in demand destruction. Meanwhile, the contractor is going to do well in 2006 because his customers will do well. And more customers announce ambitious plans every day to grow through the drillbit.

Richard Mason is Publisher of "The Land Rig Newsletter," a subsidiary of Datawright Corp. ■