

Capstar Drilling has five-year newbuild rig plan

THE LAND DRILLING business in the US has experienced a significant activity increase during 2003 and into 2004, posting much higher gains than Gulf of Mexico activity. As a result, one company has a five year expansion plan that began in 2003 calling for as many as three new rigs annually.

The company's early rigs were built by **Walker Neer** with a mast capacity of 160,000-300,000 lb static load. The masts are small to accommodate quick rig up and rig down with a minimum crew, usually two or three people, so there is no room for standing back pipe. The rigs utilize a conventional draw-works but they also have a top head

same field, for example, only 2-3 trucks are required, which can be handled by the rig crew. For longer moves, only nine loads are typically necessary. The smaller rigs also means lower fuel consumption and costs.

In many applications the design eliminates the casing crew cost. Also, no rathole or mouse hole is required.

Safety is also a consideration. There is no derrickman due to the top head drive drilling system, and there is no rotary. Spinning chains are also eliminated as each rig has an automatic pipe make up and break out machine similar to an Iron Roughneck. With the pipe handling boom, this minimizes the amount of pipe handling by the rig crew.

The rigs also provide numerous operational advantages. Connections are made with the bit on bottom, extending bit life. Minimal connection time is required, typically 1 ½ minutes, minimizing cuttings fallback and hole problems when drilling difficult formations.

An extra trip in the hole is eliminated to accommodate drill pipe laydown at the end of drilling operations. The top drive allows for circulation, pipe rotation and vertical movement during critical operations. During coring operations, connections can be made with the core barrel on bottom to maximize core recovery. ■



Capstar Drilling, an **Oil States International** company, presently has a total of 17 rigs, the two newest rigs delivered late 2003 and early this year. The two newest rigs and 11 others are 100% employed in the Permian Basin in Texas. Four other rigs are also 100% employed in Ohio. The company has also drilled wells in Southeastern New Mexico and Pennsylvania.

The company has offices in Odessa Texas, and Wooster, Ohio.

Capstar has drilled wells for nearly 20 years, and still operates with its well-maintained original equipment. It underwent a restructuring in 1997 to improve its drilling efficiency and upgrade equipment and facilities.

The company has been in the top 50 contract drillers since 1999. In fact, it has been in the top 25 drillers and continues to increase its position in terms of wells and feet drilled. In 1999, Capstar was ranked 22nd with 137 wells drilled totaling 639,041 ft. The following year the company gained 10 spots, moving to number 12, significantly more than doubling the number of wells to 350 and increasing footage drilled to 1,689,490 ft. In 2001 Capstar drilled 498 wells and 2,361,247 ft, moving the company up to number nine, and up to number eight in 2002 with 455 wells and 2,180,929 ft.

drive drilling system and a hydraulically operated pipe handling boom that accommodates 3 ½-in. to 12 ¼-in. tubulars and up to Range 3 tubulars.

Other benefits and advantages of Capstar's rigs, according to **Mike Roghair**, General Manager in Odessa, Texas, include a minimum footprint of only 80 x 100 ft. Minimum truckloads for mobilization are required.

When moving to locations within the



Capstar Drilling's Rig 19 is the newest in its fleet having been delivered earlier this year. Like the company's other rigs, Rig 19 features designs that include a top head drive drilling system and a hydraulically operated pipe handling boom.