# Abu Dhabi NDC works to drill smarter, expand fleet with refurbishment-upgrade programme

By Mike Killalea, editor & publisher

ABU DHABI NATIONAL Drilling Company has made sweeping commitments to enhancing drilling performance, improving personnel retention and training, and rigsite safety. The 26-rig contractor (10 jackups and 16 land) is also expanding its fleet, albeit cautiously with an eye toward the market, a company source explained.

"Our Rig Integrity Assurance Programme (RIAP), in which all of our older rigs complete a refurbishment and upgrade programme to extend their life span by 15-25 years, offers a cost-effective and safe alternative to procuring new rigs," he said. "We have already completed two rigs, the jackups Al Ittihad and Junana, and intend to carry on at the rate of 1 rig per year." The upgrades included conversion from slot to cantilever and increasing variable deck load. The work took about 8 months on the 2nd rig upgraded, but NDC anticipates that this will be cut to as little as 6 months on future RIAP projects.

Currently, NDC is refurbishing and upgrading its jackup Al Bzoom.

NDC has a regular maintenance programme in place in addition to RIAP. "Offshore, RIAP is a once-in-a-lifetime process," the company explained. "But in addition to that, our jackups receive 4 weeks of major maintenance every 2 ½ years." Land rigs are taken out of operations for major maintenance for 2 months every 4 years.

## DRILLING THE LIMIT

Besides the RIAP, NDC is fully engaged with its clients in the process of Drilling the Limit (DTL) to boost drilling performance. The process is about drilling in a smarter way. It involves eliminating all unnecessary steps in drilling and completing the well. It also involves performing operations simultaneously, when safely possible, such as making stands off line.

NDC is also focusing on improving rig move time. Since most of NDC's wells are of short duration onshore (3 weeks or less), each rig moves approximately 13 times every year. Fleetwide, this trans-



Abu Dhabi National Drilling Company currently has 16 land rigs and 10 jackups, including the jackup Al Hail (above), delivered in 2005. The company is now refurbishing and upgrading its jackup Al Bzoom.

lates to around 190 rigs moves. NDC is fully responsible for preparing and restoring the locations and moving the rigs using its fleet of 37 oilfield trucks and 30 bulldozers. All drilling and moving equipment is overhauled in NDC's state-of-the-art workshop.

In today's environment of 100% rig utilization, conducting maintenance can be a challenge because the equipment is running nearly constantly.

"One of the challenges is if you want to improve performance, you must also have access to the equipment and take it off line to conduct maintenance," a company representative explained.

### **RECRUITING & RETENTION**

Finding and keeping good competent people is always a major concern for any drilling contractor. NDC has suffered significant attrition of key rig personnel, notably barge engineers, rig managers and assistant rig managers, due to retirement and resignation. As a consequence, the company organized several recruitment campaigns launched in different countries over the last 2 years, according to NDC. The recruitment teams comprise not only human resources support staff but also technical specialists who compile job profiles, competency requirements and required interview format and questionnaires.

Retention is a separate challenge. To ensure compensation packages are aligned with other drilling contractors in the region, several benchmark studies are continuously undertaken and salary adjustments introduced. "Currently NDC considers itself aligned with most of the drilling companies in the region in terms of compensation packages," a company source reported. "However, the drive continues to ensure the most attractive packages on offer to employees."

He added that NDC strives to continuously maximize employee appreciation through performance reward schemes (e.g., Safety Man of the Month, Best Annual A-Performer Overall, Driver of the Month).

# **SAFETY**

NDC has amassed a proud safety record. Most recently, 2 NDC land rigs operating in the UAE successfully completed 11 years of operations without a lost time injury (LTI). Rig ND-17 reached this milestone in August 2006 and rig ND-01 in February 2007. Over those 11 years, the rig crews each worked 4.8 million manhours and drilled one million feet at more than 100 wells, including drilling and re-entry.

### TRAINING

NDC training focuses on orientation programmes starting Day One, through preparing employees for their next higher-level jobs, the company reports. The mandatory certified safety training programmes form the largest segment of the training expenditures, thereby ensuring contractual compliance with client requirements.



Since most of NDC's wells are of short duration onshore (3 weeks or less), each rig moves approximately 13 times every year. Fleetwide, this translates to around 190 rigs moves. Seen above is the ND34 rig, delivered in 2004.

To expedite the integration of newly appointed employees into the company, NDC recently introduced a 3-week

orientation programme, "Green Hat Programme."

Finally, NDC in 2003 established its own Drilling Practices School to train young UAE nationals to the level of assistant driller. The goal is to develop young UAE nationals to ultimately serve as driller and rig manager. The company screened, selected and enrolled young UAE nationals with secondary school qualification in a 2-year accelerated competencybased development programme covering the levels of roustabout through assistant driller.

Over the course of 105 weeks, recruits first train for roustabout and floorhand positions, with 4 weeks in the classroom, 12 weeks of on-the-job (OJT) training and a final 12 weeks working actual hitches on the rig. Similarly, the derrickman curriculum comprises 4 weeks in the classroom, 8 weeks of OJT and 19 weeks working hitches. For the AD job, the emphasis is on working hitches: Students are in the classroom for 3 weeks, on the job for 8 weeks and work hitches for 32.

To date, approximately 125 UAE nationals have graduated as assistant drillers.