



Jakob THOMASEN

Applying its pioneering horizontal well technology and cost-effective business model to the Al Shaheen field, Maersk has made Qatar one of its most formidable affiliates. The Danish multinational broke several drilling records, including world's longest well, transforming the offshore field into Qatar's highest producing reservoir and setting operational standards that will be copied for years to come.

The Oil & Gas Year: Maersk first arrived in Qatar in 1992 and as a mid-sized international oil company it beat out several majors to strike an exploration and production sharing agreement with Qatar Petroleum at Al Shaheen Field. How did you secure this contract?

Jakob Thomsen: In the 1970s, the Al Shaheen reservoirs were discovered but it was concluded at the time that it wouldn't be economically viable to produce from these reservoirs. At the time the technology required to extract wasn't yet available. But in 1990 Qatar Petroleum (QP) brought out the reservoir for competitive bidding. Maersk Oil was working in oil reservoirs in the North Sea that were not too dissimilar to Al Shaheen. We were making a lot of progress with horizontal well technology in the North Sea and we saw the potential application of our technology in Qatar.

Still, even as we began appraisal work in Qatar, we were not that optimistic about the commercial potential of the Al Shaheen reservoirs. We drilled an initial horizontal well, setting a world record in length at the time, but not without a lot of problems. From there we drilled a second horizontal well, another record in length, and began to see better results than we could have anticipated. The original plan had been to conduct test production, but we were concerned about pollution and thought it would be a waste to flare the oil. We quickly developed a temporary system to recover the oil with a small tanker, which we shuttled to Qatar Petroleum's Halul Terminal. This enabled us to start production two years earlier than planned and to get a wealth of information about the dynamics of the reservoirs. You want to see how the reservoir behaves when you produce and if you flare all the oil, there's a limit to how long you are going to produce. With our approach, we got a lot of information and it didn't take very long before we could launch the next step of development in 1995.

Horizontal heaven

TOGY talks to

Jakob THOMASEN, Managing Director
MAERSK

TOGY: And in 2005 came another phase of development in Block 5 of Al Shaheen...

YT: At the end of 2005 we made a plan with QP for further development that comprises the drilling of around 160 additional production and water injection wells and a significant expansion of the platform infrastructure. In all, we will establish 15 new platforms interconnected by sub-sea pipelines. It is a sizable project – we will use around 120,000 tonnes of steel, the same as 430 Airbus A380 aircraft or 12 Eiffel Towers.

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Production has increased gradually from 240,000 barrels per day to the current level of 330,000 barrels per day with a further increase when all the new platform facilities will be in place. The execution of the project is progressing now. We are more than halfway through and should be done with the installation of the new facilities by the end of 2009.

TOGY: Maersk's innovative technology earned the company its presence in Qatar, and you've set several milestones at Al Shaheen, including drilling the world's longest well (12.3 km) and horizontal section (10.9 km). How much can you project your accomplishments in Qatar to gain new contracts worldwide?

YT: In the late 1980s, we pioneered most areas of horizontal well technology, including drilling, steering the wells accurately in thin layers, stim-

ulation and completion. Of course we are applying our technology to the extent possible to any job we bid for. We are always looking at situations where we can utilize our horizontal well technology.

TOGY: *Maersk shares plunged in 2008, especially due to its 20 percent stake in Danske Bank A/S. But Maersk Oil recorded significantly higher profits than the previous year, and the production in Qatar was instrumental to that success. How critical is your work at Al Shaheen to propping up Maersk worldwide?*

YT: When the oil price is high, of course the oil and gas activities have a positive influence. For the container business and all the fuel being consumed by the ships in Maersk Line, high oil prices have a negative influence. That's a relatively simple relationship. The container business and the oil business are so different that you can't really compare. In oil we have fewer people and mainly technical specialists who recommend investments based on very limited data. When we get it right, we may have high returns.

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TOGY: *The aggregate of your previous investments in Qatar was two billion US dollars and the recent further development of Al Shaheen will total six billion US dollars. How much do those staggering construction costs create worries about the feasibility of future projects?*

YT: There's a link between the oil price and the cost of producing the oil, and that link will always be there. As an upstream oil company, we need

to find efficient and cost-effective ways of doing business, while also implementing the safest and most environmentally friendly options. That is what we believe we have done in Al Shaheen. For example, we would have needed more than double the weight of steel for the drilling wells and platform facilities at the Al Shaheen if we had used conventional technology instead of our horizontal well technology. So you can see that from a cost efficiency and energy efficiency side, we are doing a lot better than with traditional methods.

TOGY: *For major oil and gas projects in Qatar, all roads lead to Qatar Petroleum, with whom you've worked for a solid 17 years. What is the key to succeeding in a working relationship with Qatar's biggest and most prestigious company?*

YT: With Qatar Petroleum, the collaboration and understanding of the objectives is a key point to success. QP honours its agreements and so do we. QP appreciates that we are taking care of Qatar's money as though it were our own. We are very careful not to overspend, not to speculate on short-term gains but to make investments that will last many years. To a very large extent, our objectives are aligned with Qatar Petroleum and we are very thankful for the cooperation.

TOGY: *Beyond the ongoing development of Block 5 at Al Shaheen, what is your future outlook for this reservoir and for other exploration and production deals in Qatar?*

YT: We are of course always looking at other opportunities in both oil and gas, but for now our focus on Al Shaheen is the gathering of data. We have drilled 85 wells so far and have gotten a wealth of new information and surprises. We get good and bad surprises that will inevitably lead to opportunities for more activities. If you look at what we've done with this young, immature reservoir by doubling the number of wells and more than doubling the offshore infrastructure, you immediately realize that it's quite natural that we'll learn something to kick off more activity.

