



On call: the Bluewhale 1, while still named Frigstad Shekou, at Yantai CIMC Raffles Offshore
Photo: Photo: FRIGSTAD

China halts Shenhu hydrates campaign

GMGS drilling programme declared success after just one well in South China Sea

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China has decided to end a drilling programme targeting gas hydrates in the deep-water Shenhu area of the Pearl River Mouth basin in the South China Sea after achieving its objectives with just the first well of the campaign.

The well was drilled at a location about 258 kilometres south-east of Hong Kong. Industry officials said the ultra-deepwater semi-submersible rig Bluewhale 1 (formerly Frigstad Shekou) is now en route back to the CIMC Raffles yard in Shandong province rather than being moved to another location for further drilling.

The Guangzhou Marine Geological Survey (GMGS), of the Geological Survey Administration under the Ministry of Land & Resources (MLR), originally chartered the rig for a three-well campaign targeting gas hydrate that was expected to last 300 days.

“The initial drilling was successful,” said a source. However, sources said the discovery was drilled for research purposes and was not intended to presage any commercial project.

Drilling started on 28 March. The well flowed 309,000 cubic metres of gas hydrate in total over 60 days of testing, averaging 5150 cubic metres per day.

The well was drilled in water depths of 1266 metres, hitting a depth of 277 metres and the methane content was recorded as high as 99.5%.

In an eight-day period from 18 May, the well flowed an average of 16,000 cubic metres per day.

“Our target is for the well to flow more than 10,000 cubic metres per day for a week,” said GMGS on its website.

Earlier surveys in the area have identified methane hydrate resource potential equivalent to 150 billion cubic metres of natural gas, according to the MLR.

Methane hydrates are solid materials consisting of methane and water, which become crystallised under low temperature and high-pressure conditions.

A dynamically-positioned rig, built to Frigstad Engineering’s D90 design, Bluewhale 1 is capable of operating in water depths up to 3658 metres and drilling to a total depth of 15,240 metres.

The rig is operated by China Petroleum Offshore Engineering Company, which is the drilling contractor of China National Petroleum Corporation.

Late last year, Frigstad Group, one of the two shareholders of Frigstad Deepwater, agreed to sell its shares to CIMC, which renamed Frigstad Deepwater as CIMC Bluewhale Rig and made it a wholly-owned subsidiary.

Now CIMC Group subsidiary Bluewhale Offshore Engineering has taken over ownership of Bluewhale 1 and Bluewhale 2 (formerly Frigstad Kristiansand). Last weekend, CIMC Raffles started sea trials for Bluewhale 2 following the completion of equipment testing. The trials will last three weeks.

Frigstad ordered two D90-design rigs at CIMC Raffles in 2012 for \$650 million each, with the Bluewhale 2 scheduled for delivery in mid-2017.

The two rigs are outfitted with two blowout preventers and dual activity drilling packages.