

China makes major gas hydrate find

Ultra-deepwater semisub unearths milestone discovery in Shenhu area

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China has declared that it has made a major gas hydrate find in the Pearl River Mouth basin of the South China Sea, further confirming the high gas hydrate potential in the area.

The discovery well was drilled by new ultra-deepwater semi-submersible rig Bluewhale 1 (formerly Frigstad Shekou) built by Chinese yard CIMC Raffles at Shenhu area of the South China Sea, about 285 kilometres south-east of Hong Kong.



Bluewhale 1 en route to drill its debut well

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For seven days until 17 May, the well flowed a total 113,200 cubic metres of gas, with the highest daily outflow hitting 35,000 cubic metres. The methane content has been recorded as high as 99.5%.

Sponsored by Geological Survey Administration of the Ministry of Land and Resources (MLR), the drilling, which started on 28 March, was conducted in water depths of 1266 metres, with the well depth hitting a depth of 277 metres.

China is one of the countries with the highest gas hydrate reserve potentials. In the South China Sea, the gas hydrate in place is estimated at 70 billion tonnes of oil equivalent, according to CIMC Raffles.



Frigstad in deep-water rig exit

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Jointly operated by CIMC Raffles unit Blue Whale Offshore Engineering and China Petroleum Offshore Engineering (CPOE), which is wholly owned by China National Petroleum Corporation, Blue Whale 1 sailed from **CIMC Raffles yard in Yantai** on 6 March following mobilisation, reaching the drilling site after eight days.

CPOE chartered the rig in August last year for a three-well campaign targeting gas hydrate reservoirs in the Shenhu area.

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

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.



CIMC Group subsidiary Bluewhale Offshore Engineering has taken over ownership of Bluewhale 1 and Bluewhale 2 (formerly Frigstad Kristiansand), which are now separately owned by CIMC Bluewhale Rig I and CIMC Bluewhale Rig II.

Owners walk from rigs at CIMC Raffles

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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.

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