World-first coring technology edges closer to the finish line

By Janine Martin

After three years of intensive research and testing, Australian drilling equipment specialist Coretrack is entering the final stretch of seeing its Core Level Recorder System (CLRS) become a commercial reality.

Two petroleum service majors – Halliburton and Baker-Hughes/Inteq – have jumped in the ring to support Coretrack's world-first "intelligent" core-drilling technology.

Add to that the successful results of recent pressure and temperature tests of the transducer technology used in the CLRS – and it seems Coretrack is on track, barring any unforeseen glitches, for the big reveal in June this year.

The system, which records and transmits electronic data on core displacement within a core barrel in deep oil and gas wells, has already received commendation in Australia, winning Coretrack the Western Australian Government's Inventor of the Year (Development Category) prize in 2007.

Coretrack managing director and CEO Nanne van 't Riet explained that for the first time in the world, the CLRS would make it possible to transmit real time data to the operators on the rig floor regarding the acquisition of core within the core barrel.

"Whereas currently operators enter a formation not knowing if their core intake actually matches the rate of penetration, the CLRS will provide certainty in this respect – thereby revolutionising the coring process," he said.

Significantly it will prevent unnecessary "tripping" in and out of wells – which in an offshore environment could translate into 10-15 hours of lost time and half a million dollars in costs.

Mr van 't Riet also underscored the other benefit of the CLRS.

"When operators fail to detect a jam and continue coring, they are likely to mill the formation. If this happens, operators will need to drill a deviated well in order to get the required data, which could rack up millions of dollars in outlays in the offshore environment. Our tool eliminates this risk."

Coretrack is working closely with Halliburton and Baker-Hughes/Inteq to design and test various aspects of the CLRS to ensure the system's compatibility with their respective coring assemblies.

"Halliburton has been very helpful from the start, facilitating much of the initial testing we did in Oman and Saudi Arabia.

Pioneering: Coretrack CEO Nanne van 't Riet with the Core Level Recorder System.

"As a new player, it's not always easy to convince an oil company to put a new tool in a $40 million well. But when you have a partner who enjoys a great deal of credibility, it becomes much easier to have your product tested in a well."

In recent months, Baker-Hughes/Inteq provided Coretrack with similar support.

These companies along with others like Woodside and Chevron, Mr van 't Riet said, will figure in discussions to have the CLRS tested in an actual operating well.

The final round of testing will be followed by a field test of the intermediate telemetry system at Mt Horner in WA later this month.

Mr van 't Riet said the success of the CLRS would be a major milestone for the Coretrack, as it put the company in the unique position to deliver a tool or service that no one else can provide right now.

"We've got an extremely exciting product, for which there is a clear need in the industry. And compared to when the company first listed, we have now removed what will amount to 95 per cent of the technology risk associated with the development of the tool." ■

Strike 4: Po

Bezzecca-1: Positive gas flow from Po Valley's fourth gas field.

Po Valley Energy's fine run in northern Italy continues with positive gas flows reported at its Bezzecca-1 appraisal well, which lies in the company's Cascina San Pietro permit, east of Milan.

Following the result, shares in the Perth company jumped eight per cent in mid April.

Bezzecca-1 is part of Po Valley's fourth gas field development in the region.

Po Valley's CEO Michael Masterman said the results exceeded expectations from this level and were encouraging pointers for potential field development.

"The initial flows and pressure were stable with good pressure recovery," he said.

"These former ENI gas fields present a range of challenges in redevelopment but the initial gas flow and pressure results are a good start for the Bezzecca structure.

"Initial flows were tested at 2.2 million cubic feet per day on a ¼ inch choke at 1760psi during initial clean up and testing of the deepest Miocene level from 1925m to 1945m."

Po Valley will commission its maiden production at the Castello and Sillaro gas fields in northern Italy from the third quarter this year.

The company is also looking to begin production at a third field, Sant' Alberto, in its 100 per cent owned San Vincenzo licence. ■

Powering up in the Pilbara

Construction of the most efficient gas-fired power station on the North West Interconnected System electricity grid in Western Australia has begun.

The Karratha Power Station will be built next to Horizon Power's head office on land owned by the corporation and adjacent to its 132KV substation, providing a direct link into the local network.

The station will be built, owned and operated by Canadian company ATCO Power and will supply electricity to residential and business consumers in the NWIS under a long-term contract with Horizon Power.

The power station, which will bring added security to the NWIS, will have an initial capacity of 86MW.

The design, however, allows for capacity increases.

Western Australia's Energy Minister Peter Collier said the project will be a central component of the ongoing development of the Pilbara region and its continuing contribution to the state.

"It not only creates employment opportunities for the construction workforce, but it will also make a significant contribution to the local community for the long term."

The power station will initially comprise two 43MW high-efficiency gas turbines and could be augmented with a heat recovery steam generator (HRSG) that would generate electricity from waste heat.

The HRSG would enable the plant to generate more than a third more electricity for the same amount of fuel.

First power is expected by February 2010, with the station operating at full capacity by April next year. ■