Drill Club Out, But Hope Springs Eternal

he 'drill club' that Western Australia's Department of Mines and Petroleum has been trying to initiate to facilitate unconventional exploration in the southwest of the State has been plugged and abandoned.

For the past two years, the DMP has been trying to get several companies together to address the chronic shortage of rigs in the State.

They came close mid-last year when the DMP sourced a \$25 MM rig from Italian company Drillmec. A WA company Century was prepared to pay for and operate it with the help of several other explorers, and coordinate its use across the State, while the DMP had agreed to pay up to \$4 MM to mobilise it to Perth.

Just when the deal seemed sealed, one overseasbased investor pulled out and the deal collapsed. Norwest Energy, Latent Petroleum, AWE Limited, Empire Oil & Gas and even geothermal entities like the WA Geothermal Centre of Excellence, which needs to drill a well to test the geothermal potential of the Perth Basin, were involved in drill club negotiations.

Unperturbed and unrelenting in its drive to get the State's vast unconventional resources out of the ground to provide energy security, the DMP is initiating a drilling mobilisation fund that will give unconventional explorers up to \$1 MM to help source a rig. The difference is the companies will have to come up with their own money up front and the DMP will reimburse them up to \$1 MM, where as under the 'drill club' arrangement the DMP would have paid first and the company would have been able to pay back later.

This new deal is part of the DMP's \$80 MM Exploration Incentive Scheme, funded by Royalties for Regions, which is designed to assist the long-term sustainability of the State's resources sector and, subsequently, the State's energy needs.

Though the new deal will make it more problematic for smaller explorers, DMP Petroleum Division Director Bill Tinapple believes the "shale bonanza" will still come, it will just take an extra 6-12 months, providing the third boom for Australian gas in the past 30 years.

He also believes that the new deal won't be all that bad for explorers.

"It's a disappointment in some ways that they couldn't get together on a drill club, because we would've preferred that, as it helps them get the money up front. In this scheme they will have to mobilise the rig and drill the well and we would reimburse the money. However, if they know they can get it approved up front with the DMP's reimbursement coming, it should help them get the commitment to mobilise the rig", Tinapple

Getting the companies together was, for the longest time, difficult - not because of companies' egos but because of different rig specifications, mainly around the difference between rigs that can drill deep, long-reach extended horizontal wells up to 4000 m that are closer together, and lighter rigs that would drill vertically about 3000 m that would be spaced further apart, thus posing mobilisation issues. Other more detailed issues also come up, like some companies need a top drive, others want an automatic roughneck.

The ideal option - the 'lowest common denominator' option - for the drill club was a big rig capable of drilling 4000 m horizontal wells and smaller wells. However, the Italian Drillmec rig was a lighter rig that could not have drilled horizontally to 4000 m, but perhaps vertically if some casing was floated in.

The big Weatherford 826 rig, capable of drilling 4000 m horizontal wells, costs between \$750,000 and \$1 MM to mobilise within the Perth Basin. disassembled into a staggering 95 trucks - several of which are big loads that need escort vehicles with flashing lights that can only be mobilised in daylight hours. The Drillmec rig would have needed 30 trucks to mobilise around the State.

There are other options. US unconventional giant Conoco-Phillips, which is funding New Standard Energy's Canning Basin shale hunt to the tune of \$109.5 MM, is bringing a rig in, while Buru Energy is using Ensign Rig 32 for its shale gas exploration in the Canning Basin.

Another obstacle to development of WA's considerable shale resources is the general equipment challenge that the shale industry faces in Australia, highlighted by the fact that, as of December last year, Halliburton had one shale frac spread in the whole of Australia.

David Warner of petroleum consultancy DSWPET said in a paper published by CSIRO in December last year that there is a similar shortage of drilling rigs and experienced people who can design and execute the drilling and completion programs required.



The elusive Weatherford 826 rig, which has drilled deep wells in the Perth Basin, is ideal for shale gas exploration. It is pictured here spudding the Warro-4 well in April last year. Photo courtesy Latent Petroleum.

"In the current phase of exploration in Australia, capacity is not as critical as for the appraisal and development stages. The creation of a manufacturing mode of development is vital to reduce unit costs and provide the steep production ramp up required to maintain commerciality", he said.

Experience with the CSG industry in Australia indicates that this capacity can be created in Australia if the demand requires it, he added.

Stephen Keenihan, Managing Director of Latent Petroleum - which is itself working with Origin. AWE and others to source a rig for its Warro field tight gas exploration - is confident that once one of the several companies chasing gas in the Perth Basin show some success, it will make it easier for others, and make access to infrastructure and equipment easier.

"There's nothing like success to help everybody along, and certainly if one of us gets the unconventional side of it moving so that the equipment is based in Western Australia, either the fraccing crew and/or the rig, it just makes it that much easier because you then have that critical mass to keep things moving", Keenihan said.

"That's our goal, to get to that scale where we can justify having dedicated equipment here, then other people can benefit from it as well. We just need to get that inertia moving to push the industry along.

"We've seen what's happened in Queensland the first people trying to do things in coal bed methane were having all sorts of challenges trying to work out how to do it, then once they cracked that - bang, the whole industry takes off."