

LIGHT WELL INTERVENTION

Heavy Capabilities at a Light Cost | May 2012

Woodside identified an opportunity to reduce subsea well intervention costs ten years ago. Today we have brought a strong and unique lightweight well intervention capability to our region.

Ten years ago, Woodside identified an opportunity to reduce subsea well intervention costs. We were instrumental in bringing a Light Well Intervention (LWI) capability to our region. Our first LWI contract was with TS Marine and WellOPS SEA who provided the first LWI system.

Our first operation commenced in 2008. Since that time, Woodside has successfully installed trees and intervened on Vincent, Enfield & Pluto wells from a LWI vessel with significant cost savings. These benefits come with a risk. If operations do not go to plan, occasionally we are required to bring a floating rig in to complete operations.

Woodside previously held the world record for the deepest subsea wire line intervention at 397m on Vincent, however, with current technology subsea wire line can now access around 3,000m.

Woodside is currently using this technology to suspend two wells in the Echo Yodel field.

The LWI system we currently use is a 7" system. This has a deeper water capability than the 5" LWI systems pioneered by Woodside.

Other companies, such as Expro in

collaboration with FugroTSM, have recently invested in ground breaking SSWL technology with their AX-S LWI system. This system is installed on the Haviala Phoenix and has recently been successfully trialled in Norway. The AX-S allows multiple wireline tools to be deployed subsea. This improves the safety and operational efficiency.

The next step will be the provision of Subsea Coiled Tubing from a LWI vessel to access horizontal wells, without the use of a tractor.

Global LWI capability has grown relatively quickly in recent years, however providing a long term regional capability in Australia remains a challenge. This is due mainly to the relatively small number of subsea wells in the region as compared to other parts of the world (eg North Sea and Gulf of Mexico).

Woodside currently has 68 subsea production wells installed around Australia with this number expected to grow significantly over the next five years.

Woodside expects the use of LWI technology will increase. It is a cost effective alternative to intervene and repair subsea wells compared with drilling rigs.

QUICK FACTS

- LWI vessel day rate is typically around 50-60% less than a rig.
- A dynamically positioned LWI vessel has no requirement for support vessels and no requirement to run or pull anchors.
- LWI vessels can move quickly between well locations.
- LWI has a reduced environmental impact and lower safety risk.
- Woodside has supported and developed local capability.
- LWI systems can be used with different vessels which provides a degree of flexibility and options in a competitive market.



Light Well Intervention System