Case Study:

Interwell's Barrier Verification System successfully used for pre-P&A activity

Date: November 2019 Region: Asia Pacific – Australia



Key Capabilities

- Barrier verification is simple, reliable and done in real- time using surface powered equipment
- Improves efficiency with wireless transfer of well information
- Provides documentable information on installed barrier and pressure tests
- Reduces time taken to verify barrier

Challenge

An Operator in Australia had two offshore oil-producing wells that had depleted their reservoirs. With communication between the tubing and the annulus present, the client needed to re-establish well integrity using Vo-rated barriers to suspend the well and isolate this communication.

Solution

Using Vo-rated Interwell High Expansion Retrievable Bridge Plugs (HEX) it allowed the barriers to be run and set in the liner below the Upper Completion to fully isolate the reservoir. To verify that the they had successfully re-established wellbore integrity, Interwell then ran its field-proven Barrier Verification System (BVS) and Surface Powered EST (SPEST) systems. This allowed pressures between the upper and lower barriers to be monitored live, confirming barrier integrity.

Value Created

Through its unique combination of technologies (HEX, BVS and SPEST), Interwell was able to successfully prove that the reservoir had been isolated and confirm barriers set to secure the Well. Having the barriers set within the Liner allowed testing of the Production Packer and simplified retrieval operations at a time when the Completion would be retrieved for abandonment further down the line.

Conducted on-location, the customer was able to witness the HEX Plugs being successfully set via the SPEST, then prove a positive isolation had been established by monitoring the pressure between the two barriers by interpreting data real time from the BVS. By being able to document the validity of the lower barrier & Production packer integrity, Interwell was able to save the client significant time vs. traditional isolation methods while optimizing the suspension to allow efficient future abandonment.



