Retrofit Retrievable Gas Lift Straddle installed from a LWI Vessel (UK North Sea)

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Presentation

• The Challenge
• The Well Completion
• The Well Status
• The Vessel
• The Well Solution
• The Operation
• The Result
• The Conclusions
The Challenge (in summary)

- Brenda Well D3 Shut In
- Gas Lift Failure
- No Production
- The Challenge! Re-establish Production
The Challenge (in more detail)

- WHT
- WHP
- GL Rate

Brenda Well D3 Production Data
The Well Completion

- Brenda D3y subsea well completed in 2006
- Three gas lift mandrels
- Only the top gas lift valve was operating
- The maximum gas lift injection pressure was 110 bar
The Well Status

• Safety Valve OK?
• Top Valve Failed
• Lower Valves too Deep
The Vessel

The Island Constructor
The Well Solution

• Upper Triple Packer Straddle
• Lower Dual Packer Straddle
(both with Retro-fit GLV’s)
The Operation

• Safety Valve Tested OK
• Upper Gas Lift valve found to have failed
• Unable to pull the upper gas lift valve and change it out
• Punched the tubing between upper and middle SPM
• Successfully installation of retro-fit 5-1/2” GLV straddle (dual packer)
• Punched the tubing above the upper SPM
• Successfully straddled the upper SPM
• Installed a retro-fit 5-1/2” GLV straddle (triple packer)
The Result
Conclusions

• Well back on full production
• Safe & successful RWLI operation
• 2 Packer and 3 Packer Interwell retrievable straddles installed (both including a PTC Gas Lift Valve)
• All well intervention objectives achieved
Questions?