

real results

IPV Intervention – less Packer Setting Valve successfully provides isolation from below, without the need for wireline intervention.

The Challenge

Deutsche Erdöl AG's (DEA) Mittleplate field development comprises of multiple high-tech, multi-lateral extended reach wells. The highly deviated nature of these wells means that traditional well-intervention would be demanding, costly and hazardous. DEA required the development of new technology to set hydraulic packers in high deviation extended reach wells, without the need for wireline intervention.

The Solution

Precision Oiltools designed and developed the Intervention-less Packer Setting Valve (IPV), an ISO 'Type A' barrier valve that cut out the need for well intervention. This was all completed on time utilising Precision Oiltools' in-house design and manufacturing capabilities. The IPV uses a patented captive ball design to provide isolation from below the packer, allowing packer setting to commence. The valve may then be opened by applying a predetermined opening pressure from above. This opening pressure could be simply adjusted on the rig floor without the need for a service engineer. The valve opening gives a clear indication in the hydraulic pressure, which can be easily identified from the surface. Once open the ball stays open, allowing for full tubing ID through the ball.

Key factors

- Reduce Risk
- Improve Safety
- Save Time
- Save Cost

Key factors

- ISO 'Type A' valve with patented captive ball design
- No intervention or setting balls at any inclination
- Easy opening pressure adjustment means no service engineer required
- Developed and manufactured in-house saving time and cost



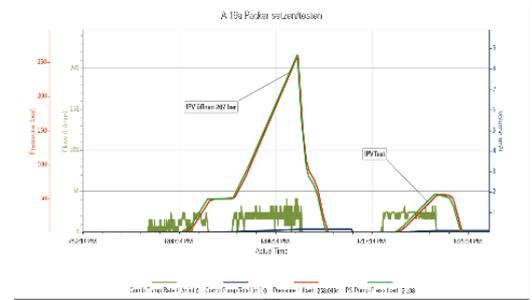
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The Result

The Precision Oiltools IPV was run on 6 production wells in the Mittleplate development with a 100% success rate, after having been developed and manufactured on time.

“we always saw the IPV shearing at the expected pressure.....” Andree Frohberg, Senior Engineer, Deutsche Erdöl AG

Well	Date	MD / TVD	Opening Pressure
MPA -19a	February 2016	-	255 bar (3,698psi)
MPA -7b	March 2016	-	210 bar (3,045psi)
MPA - 16a	October 2016	3107/2688 m	248 bar (3,597psi)
MPA -6	January 2017	2110/1895 m	248 bar (3,597psi)
MPA - 14a	January 2017	3560/2720 m	188 bar (2,726psi)
MPA - 18	February 2017	2121/1784 m	270 bar (3,916 psi)



“The IPV worked very well - we were able to set the packer with 210 bar and afterwards the IPV was opened with 266 bar (12 screws) with undoubted indication, we are happy, thank you for the excellent work.”

For more information on any of the details featured here or for further technical information on the Intervention-less Packer Setting Valve please contact us at enquires@precisionoiltools.co.uk

