

# real results

IPV1 Interventionless Precision Valve successfully provides isolation from below, without the need for wireline intervention.

## The Challenge

Wintershall Dea Deutschland AG 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.

## Key factors

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

## The Solution

Precision Oiltools designed and developed the Interventionless Precision Valve (IPV1), 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 IPV1 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 features

- **ISO 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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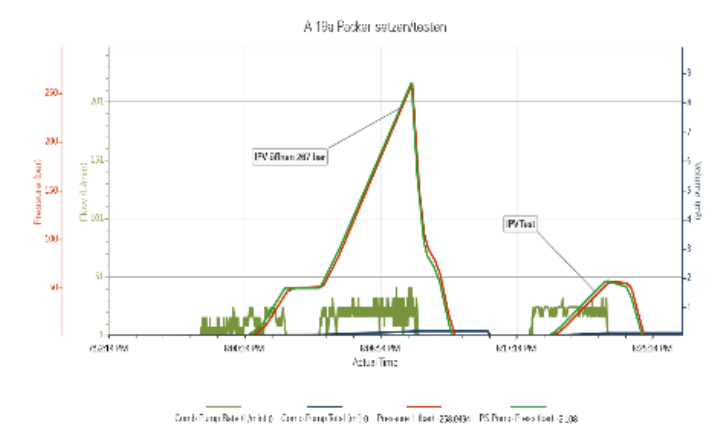


## The Result

The Precision Oiltools IPV1 was deployed on 15 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, Wintershall Dea Deutschland”*

Well	Date	Opening Pressure	Successful Deployment
MPA -19a	Feb-16	255 bar (3,698psi)	Yes
MPA -7b	Mar-16	210 bar (3,045psi)	Yes
MPA - 16a	Oct-16	248 bar (3,597psi)	Yes
MPA -6	Jan-17	248 bar (3,597psi)	Yes
MPA - 14a	Jan-17	188 bar (2,726psi)	Yes
MPA - 18	Feb-17	270 bar (3,916 psi)	Yes
MPA -17	Feb-17	205 bar (2,973 psi)	Yes
MPA -20	Nov-17	230 bar (3,335psi)	Yes
TBA	Jul-18	TBA	Yes
TBA	Jul-18	TBA	Yes
MPA -22	Mar-19	239 bar (3,466psi)	Yes
MPA - 8	Oct-19	245 bar (3,533psi)	Yes
TBA	Jul-18	tba	Yes
MPA 8	Nov-19	245 bar (3,533psi)	Yes
TBA	Sept-2020	253 bar (3669psi)	Yes



Precision Oiltools Ltd, Sheriffburn House, Kintore, Aberdeenshire, AB51 0XA, Tel: +44 1224 725566

[www.precisionoiltools.co.uk](http://www.precisionoiltools.co.uk)