



# First Inter Remote Shatter Valve in Asia Pacific Region Successfully Mitigating Risks in Workover Operations

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Region: Asia Pacific



## Key Capabilities

- Bi-directional barrier qualified to ISO 14310 V0
- Full bore ID after barrier removal
- Remote activated and efficient barrier removal
- Add-on feature allowing to mitigate risks in RBP retrieval

## Challenge

A major operator in the Asia Pacific region was looking for a solution to minimise operational risk in a workover to optimise gas recovery through enlargement of the production tubing. In such operations, a temporary suspension barrier is usually required. Concerns were raised by the client in relation to using a retrievable bridge plug (RBP) as a barrier, where debris falling and settling out could make it more challenging to retrieve the RBP. The challenge was to develop a solution where the high producing zone could still produce through the RBP, in the event the RBP could not be retrieved.

## Solution

Interwell proposed an innovative solution to run an Inter Remote Shatter Valve (IRSV) in conjunction with Interwell HPHT packer and expandable junk catcher (EJC-A). By combining the IRSV remote multicycle glass plug and HPHT packer, they form a reliable gas tight ISO 14310 V0 barrier, while at the same time allowing for the production tubing to be cut above and recompleted with a bigger tubing. The addition of the EJC-A ensured that little to no debris fell around the packer element, mitigating any risk on retrieving the HPHT packer and IRSV glass plug. Prior to retrieval operations of the HPHT packer commencing, the IRSV was shattered open through the application of a set number of pressure cycles, allowing for the equalization to take place. An additional fail-safe measure was provided in the event the packer could not be retrieved. Once the IRSV was shattered open it created a large ID in which gas production could still take place, while providing a large enough area in which future well intervention tools could pass. Interwell's IRSV glass plug is a bi-directional barrier which can be installed below any intervention assembly. The IRSV can also be integrated as part of the completion string as a plug to set the production packer or allowing for pipe to "float" when running in hole. The IRSV is qualified according to ISO 14310 grade V0 and has an extensive run history globally.

By cycling the well pressure above the valve at a predetermined number of cycles, the barrier element will shatter. This leaves a full-bore ID through the valve for production and/or intervention. No parts of the barrier element will remain in the well once production starts.

## Value Created

By running the IRSV together with the HPHT packer, the operator was able to re-complete the well with a reliable temporary barrier in place and successfully reduced the risk of losing a prolific producing well in the re-tubing workover operation. The IRSV was successfully remotely opened at the pre-determined pressure cycles and was retrieved as planned together with the HPHT packer.

