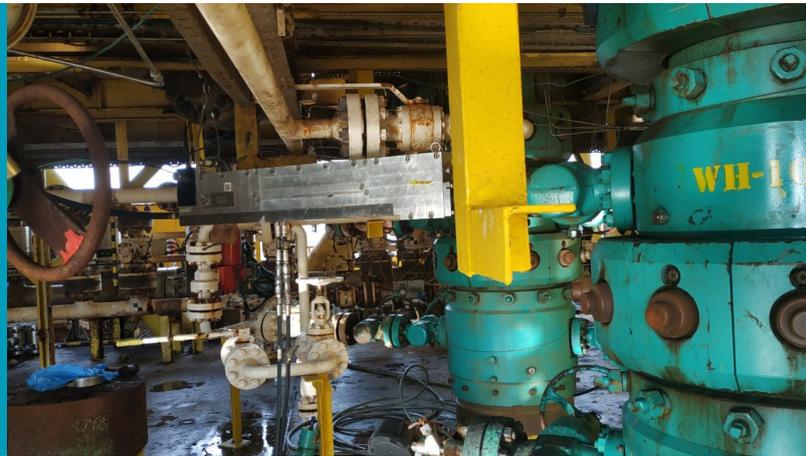


## Expro Excellence

# Octopoda<sup>®</sup> deployed to successfully reduce the Sustained Annulus Pressure (SAP) in the B annulus

## Well Intervention and Integrity



### Objectives and background

- Petronas Malaysia had a well experiencing Sustained Annulus Pressure (SAP) in the B annulus above the 300 psi (21 bar) limit of operating envelope acceptance
- A traditional "lubricate and bleed" operation was estimated to take 18 weeks to complete
- Well workover was not an option due to high cost

### Expro Excellence

- A hydraulic intervention was carried out in the B Annulus utilizing Expro's Octopoda<sup>®</sup> Annulus Intervention system. The objective of the hydraulic intervention was to displace the existing annulus contents with a heavy (14.8 PPG / 1.8 SG) brine
- The fluid displacement was completed in 9 days, with 65 bbls (10,300 litres) of heavy brine pumped via a 6.9 mm OD AI hose positioned at 75 feet (23 meters)
- Fluid returns were taken and monitored on the passive side of the wellhead
- The Sustained Annulus Pressure was reduced to 150 psi (10.3 bar), this enabled the well to be produced without the requirement to have a Management of Change process in place

### Value to the customer

- This was a cost effective alternative to a full well workover and competitor solutions
- Octopoda<sup>®</sup> enabled a significant reduction in carbon footprint compared to traditional methods
- The customer was able to regain annulus integrity within acceptable limits by swapping out the annulus contents with a heavy (14.8 PPG / 1.8 SG) brine
- This project was completed, from mobilization to de-mobilization within 3 weeks versus the "Lube and Bleed" alternative which would have taken 18 weeks to complete
- The lifetime of the casing and annulus cement was extended by the elimination of pressure cycling experienced during "Lube and Bleed" operations
- The Expro Octopoda<sup>®</sup> solution utilized minimal personnel and equipment footprint and was powered by the Platform air supply



**We, the Petronas Well Integrity team finally managed to rectify the sustained annulus pressure issue for this well after a series of past trials with other technologies and methods."**

Customer quote



### Well integrity

