

**EXPRO**

WELL FLOW MANAGEMENT™

/ Expro Excellence Subsea

Expro develops a hybrid, rapid EH response control system, focused on safety critical functions



Objectives/background

- Expro commenced work for BP in Azerbaijan in 2007, for the provision of an ELSA DH completion landing string on the Azeri-Chirag-Deepwater Gunashli (ACG) fields; in 2013, BP required a 15K EH ELSA HP completion landing string for the Shah Deniz Stage 2 Project
- BP required a subsea completion safety system for the well commissioning of Shah Deniz Stage 2, one of their largest investments requiring a 12 year drilling programme to access 50 trillion cubic feet of gas
- Specifically, BP required a fast response system for the high rate wells, suitable for the harsh environment with pressures up to 15,000 psi and potential debris
- Expro has been awarded a four year extension that will see Expro provide subsea landing strings to BP up to 2022

Expro Excellence

- Expro developed a hybrid, rapid EH response control system, focused on safety critical functions – a system usually designed for deepwater operations
- Developed a new 15K lubricator valve, based on Expro's unique high intensity ball valve (HIBV) technology
- In response to a request for a system that could monitor the pressure and temperature in the production bore, Expro developed the pressure monitoring

system, which is positioned between the two lubricator valves (LV), to monitor the lower LV sealing capacity once closed (which also minimises the potential for differential opening of the ball valve)

- Commitment from Expro: a new, 8,500m² purpose-built facility was completed in 2018 allowing all equipment maintenance and testing to take place undercover; overhead cranes allowing tandem operations; a clean room and hyperbaric test cell enabling EH control systems to be maintained and tested to wellbore conditions. This allows Expro to provide integrated subsea services to clients in the region

Value to client

- Delivery of a system that will enable the safe completion and flow back of high rate, high pressure wells
- A system that has met BP's exacting technical requirements and has passed through BP's TRAP (Technical Risk Assurance Process)
- BP found a partner that would support and encourage the development of Azeri nationals (has increased from four to 11 Azeri nationals)

Direct-hydraulic (DH)
Electro-hydraulic (EH)
Expro Landing String Assembly (ELSA)
High pressure (HP)
High debris (HD)

**EXPRO
AND BP IN
AZERBAIJAN****>11 YEARS
SINCE 2007****ACG &
SHAH DENIZ
STAGE 2****33
COMPLETIONS****0 LTIs
SINCE 2007****40% AZERI
NATIONALS**

Contact

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