EXPRO

Expro Excellence

Expro delivers non-intrusive solution for ESP optimisation

Meters

Objectives and background

- An operator with a large number of producing black oil wells had downhole Electrical Submersible Pump (ESP) systems with gas separation systems installed to augment production

- The ESP systems were subjected to higher gas rates and varying pressures from the initial design specification

- The customer did not have individual well monitoring in place and therefore had no visibility on well inflow performance and on the efficiency of the downhole separator

- The customer was facing shutting down the ESP systems to reduce the production rate to avert catastrophically damaging the ESP and avoiding costly work over

- The customer approached Expro for an non-intrusive solution

Expro Excellence

- Expro proposed utilising a non-intrusive methodology to monitor and provide reliable measurements

- These measurements were taken at the wellhead without the need to modify the well configuration

- Expro were able to measure intake pressure, Producing Bottomhole Pressure (PBHP) and Annular Gas Flow measurements directly at the surface wellhead in real time

Value to the client

- The customer received reliable measurements, which gave them insight into the pump and well inflow performance, giving the customer an understanding of how their well was performing.

- The annulus gas rate provided by Expro gave the customer an indication of the downhole separator efficiency

- The customer was now able to access ESP and well performance monitoring, results were input to reservoir models and nodal analysis.

- The customer used this insight to increase pump and separator performance and maximise production from the well

- Expro provided the customer with a non-intrusive solution from the surface. There was no requirement to break pressure containment and surveillance was performed within one working day

24/7 monitoring

Insightful

Contact

For further information please contact:
meters@exprogroup.com
or visit
exprogroup.com/meters