

# Expro Excellence Innovative LCM Clean-Up Solution

## Well Flow Management | Well Testing



### Objectives and background

- The customer had been experiencing challenges with a highly productive flowing well which had sustained losses of Loss Circulation Material (LCM) during work over operations resulting in the producer well being shut-in for two years
- Expro had a long-standing relationship with the customer but not from a well test perspective, we had recently been discussing our flow back capabilities with the customer
- The well was put onstream by the customer resulting in a total platform shut down due to the LCM interacting with the platform process safety system. The well could not be flowed through the platform production equipment without all the solids being removed from the well effluent, the well was effectively offline until a solution could be implemented. This well was shut in for nearly two years
- Expro managed to offer the best technical solution of flowing the well while cleaning the LCM before flowing through the platform separator

### Expro Excellence

- The scope of work was to perform a flow back and solids separation in an oil well with associated gas with 1% H<sub>2</sub>S for an expected duration of 60 days. However, during the flow back the solution delivered by Expro allowed the well to produce at a higher than anticipated flow rate. The customer benefited from an incremental gain in production due to the solution delivered by Expro leading to a prolonged flow back period beyond the initially projected operational time frame
- Expro's solution involved the use of an innovative high-pressure filtration units (10K) with double block and bleed. Expro developed a 10K filtration solution which allowed for the filter element to be changed in less than 10 minutes compare to 45-60 minutes with a classic filtration system. A flushing system was also deployed to eliminate the H<sub>2</sub>S content
- To allow for equipment annual recertification, a safe extension and operational continuation of the project, the flow back package was recertified in country and reinstalled onsite, this process involved rigging down the package, performing certification and sending back onsite for reinstallation; this was completed in a matter of days

- To reduce any further impact on production from the annual recertification of the flow back package, a second entire package was mobilized to the customer site. This led to the well being off line for just a few hours
- Expro provided an innovative solution to our customer's high potential producer well which was shut-in for over two years due to large quantities of LCM in the well with varying LCM product density (light fiber to metal ball)

### Value to the client

- Expro flowed the well for a total of 668 days when initially requested to operate for only 60
- Expro's filtration system allowed the customer to produce approximately an additional 3,000,000 barrels of oil and gas over 668 days from a well which would have remained shut in otherwise
- The operation was completed with no recordable NPT and no HSE incidents

### Safety



### Increased productivity

