

WELL FLOW MANAGEMENT™

/ Expro Excellence **DST/TCP**

Expro performs dynamic underbalanced TCP and avoids well stimulation



Objectives/background

- Expro has over two years TCP/DST contractual experience with a National Oil Company (NOC). They wanted us to test an exploratory zone in a production well before putting this additional zone into production
- The initial plan was to perforate the zone with wireline and perform a DST with provision for proppant fracturing in case the well did not flow naturally
- Expro reservoir engineers analysed the reservoir data and observed that the combination of permeability, low reservoir pressure and positive skin would stop the well flowing naturally
- Expro recommended perforating the underbalanced zone using TCP to reduce or move the skin effect; thus allowing the well to flow naturally

Expro Excellence

- Expro designed the TCP system to achieve dynamic underbalanced perforation using a TCP/DST string in static underbalanced well condition
- The zone was perforated using a hydraulic delay firing head and the well started flowing naturally
- The downhole pressure and temperature gauge data was analysed and pressure derivative showed negative skin which was achieved with the help of 700 psi static underbalance and 300 psi dynamic underbalance during perforation

Value to client

- Underbalanced TCP perforation allowed the well to flow naturally, which avoided the additional cost of stimulation
- This solution saved additional costs and time associated with multiple wireline runs to perforate the well
- A single run of TCP/DST string, provided data to the client which helped them make informed future decisions

Cost saving



~700 psi Static Underbalance ~300 psi Dynamic Underbalance

Contact

For further information, please contact: dst-tcp@exprogroup.com Or visit:

www.exprogroup.com/dst-tcp

