

Expro Excellence Non-intrusive measurement solution prevents potential NPT

Well Flow Management | Flow Surveillance



Customer challenges

- The customer needed to quantify fluid load recovery and flow rate during milling and early fracflowback operations
- Monitoring frac load recovery and flow rates during milling and flowback will provide insight into effective fracture length and fracture efficiency evaluation
- Obtaining accurate flow rates was challenging due to the presence of plug debris, proppants, sand and possible entrained gas
- The customer wanted to monitor the flow velocity to maintain the fluid returns below the erosional velocity limit

Expro Excellence

- Expro installed a SONAR meter to provide real time volumetric flow rates and real time velocity measurement
- Expro provided on-site real time instantaneous rate and totals of the frac-recovered fluids
- Expro provided a non-intrusive solution and clamp-on design

Value to the client

- The SONAR meter took direct measurements of the actual flow velocity and GVF (Gas Void Fraction) minimizing the HSE risk associated with screen-out and erosion
- Potential NPT (non-productive time) saved up to 72 hours in the event of a screen-out
- 20,000 bbls fluid and 3,400kg total solids recovered
- 12 plugs milled per well and 2,200ft length of lateral
- The SONAR meter measurement identified an increase in gas production during the cleanup process and subsequent flowback
- The customer received a reliable and robust non-intrusive measurement solution unaffected by solids or debris



