

Expro Excellence QPulse™ allows for independent multiphase flow measurement

Well Flow Management | Flow Surveillance



Objectives and background

- The customer was looking for a non-intrusive solution to test production flow rates for over 40 production wells across multiple fields
- The wells were instrumented with Wet Gas Meters but started suffering liquid loading which affected the accuracy of the multiphase measurement
- The wells have no tie-in points to allow inline testing without interrupting the production
- A high turndown testing solution was required with minimal pressure drop
- A capability to measure low liquid production rate was critical to identify potential liquid loading and water influx in individual wells
- The solution needed to be operational even on remote wellheads with limited access

Expro Excellence

- Expro provided its QPulse™ solution, a non-intrusive, portable multiphase flow surveillance solution that uses proprietary SONAR Meter technology combined with MultiTrace® technology
- Expro SONAR Meter provides accurate gas volumetric rates unaffected by wetness
- MultiTrace® provides a direct measurement of the condensate and water flow rates utilizing a non-radioactive tracer dilution technique
- The use of QPulse™ allowed for testing the wells at actual flowing conditions and without any production interruption
- High turndown measurement solution for multi-rate testing at different chokes with liquid rate measurement down to a few barrels per day

Value to the client

- Accurate and direct measurements for Gas, Condensate and Water rates independent of any PVT or Water Cut computation
- Liquid rates have been used to validate the Wet Gas Meter inputs to improve the measurement uncertainties
- QPulse™ provides the necessary data to understand the assets' production profile and the liquid loading behavior for individual wells
- Cost-effective, compact and mobile solution alternative as compared to conventional testing methods

Time saving



Decreased costs



Lower carbon footprint

