



**EXPRO**

WELL FLOW MANAGEMENT™

# / Expro Excellence Meters

Clamp-on sonar surveillance during deliquification increases production by 50%



As production rates decline over the natural life of a gas well, gas flow velocities can decrease to the point at which they are insufficient to lift produced reservoir liquids. Liquids then build-up within the well bore back pressuring the well, resulting in a further reduction in production rates. Left unchecked, the build-up of liquids can eventually 'kill' the well.

## Objectives

- Work with customer to provide solution to declining gas production on a dry gas reservoir platform, attributed to build-up of liquids within the well bore, whilst undertaking deliquification program – ultimately avoiding production loss because of a build-up
- To deploy a temporary well test separator to measure the effectiveness of a foam treatment to enhance production – used as an alternative to conventional well test packages which can be more costly
- Provide the customer with a more cost-effective method of establishing their deliquification process

## Expro Excellence

- Following track record of successful implementation, Expro Meters identified as providing cost effective surveillance to monitor the effect of customer's deliquification program

Expro Meters deployed both **ActiveSONAR™** and **PassiveSONAR™** technologies during the test. The combination of the two technologies ensures robust measurement over a wide range of gas, liquid and foam production conditions.

- Sonar meter clamped-on to temporary pipework on the inlet of the test separator; results could be compared directly with the results from the gas leg of the separator
- Sonar meter also installed on production piping to provide a measurement of well production, without restriction of the well test package
- Mobilised quickly: specialist technician and equipment onsite within one day of initial request
- Well test quality surveillance of produced gas rates conducted by a single field service technician, capable of being deployed with equipment via helicopter

## Value to client

- Convenient and cost effective means of quantifying the effectiveness of well deliquification than conventional well test separators
- Four wells tested, each operating over multiple flow rates
- Real-time gas flow rates from the moment the well was opened up and throughout the evaluation period
- Gas rates provided by the sonar meters were within 5% of the gas rates reported from the test separator
- Over 50% increase in production

## Key deliverables

- Compact and lightweight
- Fast deployment possible; operational within one day of call off
- Real-time gas flow rates
- Well suited for the operational constraints of normally unmanned platforms
- Significant increase in production



## Contact

For further information, please visit [exprometers.com/contact](http://exprometers.com/contact) or call **+1 (203) 303-5686**.



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