EXPRO

Expro Excellence

Customer resolves metering uncertainty with Expro ActiveSONAR™

Meters

Objectives and background

- An operator of an offshore field with subsea wells tied back to a FPSO was measuring bulk flow rates for a liquid transfer line using daily single point stock tank values

- The customer was experiencing issues reconciling the stock tank to the export line readings

- The customer retrofitted a Vortex meter to the transfer line to provide real-time volumetric measurements to help reconcile the difference between the stock tank and the export readings

- The Vortex meter readings did not match either the stock tank or the export line

- Both partner and regulatory reporting requirements meant the customer had to resolve their metering uncertainty

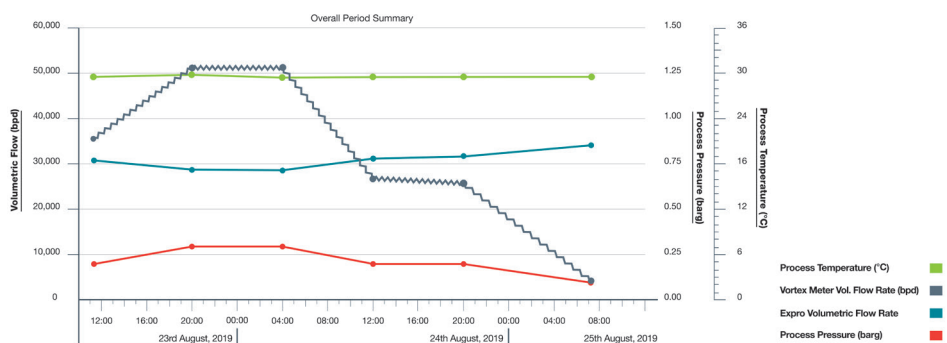- The customer approached Expro to provide a reliable solution

Expro Excellence

- Expro proposed using an ActiveSONAR clamp on flow meter to monitor, validate and/or eliminate errors in the existing metering system

- The ActiveSONAR was installed without any modification to the piping

- Initially, the Vortex meter was bypassed and the ActiveSONAR was compared to stock tank readings, which were in agreement

- The Vortex meter was then compared to the ActiveSONAR, which allowed the ActiveSONAR to determine any process issues

Value to the client

- Expro ActiveSONAR™ diagnostic data indicated two different flow characters in the pipe, periods of stable flow and of instability

- The Vortex meter showed significant variability in reported flow rates when compared to stable rates reported by ActiveSONAR

- The ActiveSONAR flow rate was within a few percent of stock tank measurements

- Expro was able to highlight the process issues causing the error in the Vortex meter

- The customer resolved the metering issue and was able to report accurate measurements meeting the regulatory requirements

Insight

Overall Period Summary

Legend	
Process Temperature (°C)	(green)
Vortex Meter Vol. Flow Rate (bpd)	(grey)
Expro Volumetric Flow Rate	(teal)
Process Pressure (barg)	(red)

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Contact

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