

Expro Excellence

Customer upgrades clamp-on metering

Well Flow Management | Flow Surveillance



Objectives and background

- A major operator approached Expro looking for a metering solution for the produced water overboard line on a North Sea platform
- To meet OSPAR regulations the customer needed to upgrade their existing in-line metering
- The customer initially installed other flow meter types:
 - In line mag meter
 - Clamp on ultrasonic meter
- Both meters provided unreliable flow measurements due to the high salinity, conductivity and the presence of oil, fine sand and dissolved gas
- Expro provided a non-intrusive permanent metering solution which had a measurement accuracy of ($\pm 2\%$) which was well within the customer's requirements

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- Our customer was cautious in purchasing a third meter, however an Expro ActiveSONAR™ flow meter was initially provided on a temporary surveillance basis. The meter was clamped onto the pipe downstream of the pipe reducer and also positioned upstream on the in-line magnetic flow meter and on the flow line control valve, non ideal flow conditioning
- There was no adverse effect on the Expro ActiveSONAR™ meter measurement due to the salinity, solids and or oil. Expro's flow studio diagnostics demonstrated the presence of entrained air from the pumps
- Subsequently the flow meter was integrated into the platform DAQ system to provide real time data

Value to the client

- Expro's ActiveSONAR™ meter provided a successful solution in providing metering where multiple flow meter types had failed previously
- The customer was satisfied with the data provided onsite during the surveillance and decided to purchase the meter
- The customer met OSPAR regulations with a measurement accuracy $\pm 2\%$

Cost-effective

