

Expro Excellence

Robust non-intrusive metering provides real time volumetric flow rate on sour water disposal wells

Acumen



Objectives and background

- The customer was looking for a non-intrusive accurate volumetric flow rate measurement of their sour water disposal to injection wells at their new processing plant
- Due to the extreme distance between the facility and the injection wells, there was a need for monitoring to ensure no leaks or breakages occurred in the 100km pipelines between the pumping station and injection wells
- The customer required a metering solution which would not be affected by the presence of H2S and could withstand harsh weather conditions
- The customer required a robust metering solution for the abrasive content of the disposed fluids, which presents a challenge for metering technologies

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- Traditional inline clamp-on metering technologies were not suitable for this application due to the high H2S content and solid particles
- Expro's ActiveSONAR™ non-intrusive clamp-on flow meter was selected, and was capable of meeting all of the customer's objectives
- The project was performed at the gas plant with the installation and commissioning of two of Expro's ActiveSONAR™ flow meters and LCD local displays. The equipment was installed onto the water disposal lines upstream of the wellhead valve

Value to the client

- The customer received reliable real-time (24/7) flow rates
- Expro's ActiveSONAR™ flow meters were not affected by solids or H2S
- On-site customer representatives were able to compare the combined flow rates reported by Expro's ActiveSONAR™ flow meters on lines SWD1 and SWD2 to flow rates measured at the water injection pumps. Comparing the flow rate at the pump and remote injection location provided the customer with the surety of pipeline integrity and injection well capacity
- This solution enabled the customer to have Zone1 Local Display readings at the meter location
- The customer was able to obtain an accurate flow measurement in harsh weather conditions

Project highlights

- Real-time surface monitoring
- Meter unaffected by solids and H2S
- Robust designed meter able to withstand harsh weather conditions
- Zone 1 Local Display readings at meter location
- Clamp-on non-intrusive installation
- Small footprint, compact design



We are very pleased with the performance of the meters and technical support provided by Expro during installation and commissioning of the meters at the plant."

Customer

Bespoke solution



Contact

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