

# SEASTREAM<sup>™</sup>

## Compact Seastream - SPFM Water Injection Metering

### APPLICATION

In the oil industry, “water injection” is used to stimulate production by injecting water to increase the pressure in an oil reservoir (also known as voidage replacement). The increased pressure will sweep or displace oil from the reservoir and push it towards a well.

On Subsea wells, Reservoir Engineers typically generate injection rate data by either:

- Low accuracy solution – measuring the differential pressure across an injection choke (valve)
- Higher accuracy solution – a flow meter installed on the subsea tree or manifold

### CHALLENGE

Approximately 30% of the hydrocarbons in a reservoir can be extracted, but water injection increases the recovery factor, helping maintain the production rate of a reservoir over a longer period.

How does the reservoir engineer improve the recovery factor, when:

- Subsea real estate is at a premium
- Injection rates can change dramatically over the life of the field
- Incorporating accurate flow calculations into a subsea system can be challenging



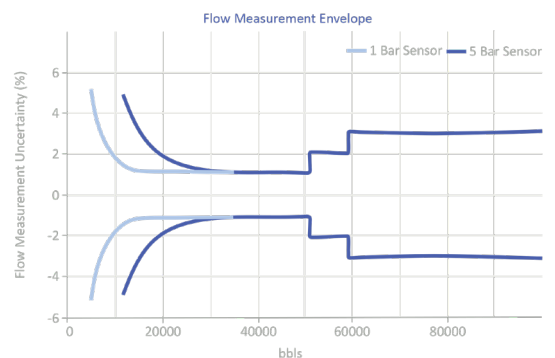
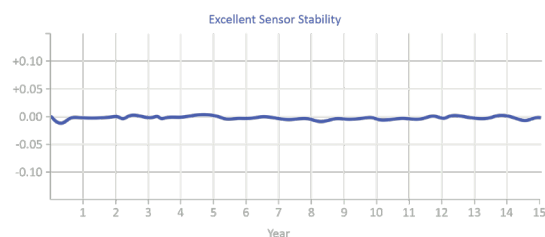
### SOLUTION

Seastream meters, designed by our flow metering specialists, offer high accuracy and reliable injection data, even in the harshest of subsea environments. Our meters, supported by the ISO5167 international flow measurement standard, is recognized as a robust ‘Fit and Forget’ flow metering solution.

### SEASTREAM

The Compact Water Injection Seastream Flowmeter has been specifically developed to reduce envelope size, provide unrivalled injection data, while reducing lead time and installed cost. Fully digital sensors and unique FloCalculator software are integrated as standard, ensuring long term stability of measurements and ease of integration into subsea control systems.

Deploy our Compact Water Injection Seastream to play a key role in efficient well management and improve recovery factors from subsea oil fields.



- New compact design – 55% reduction in length
- Enhanced Flow range – 30% additional flow capacity
- Assured measurement – unique flow rate output
- Reservoir optimization tool