



# ScanWell

## Case Study

### Production Surveillance

# Troubleshooting Gas Lift Rate by Tracer Dilution Method

#### CHALLENGE

A major operator in the North Sea suspected a measurement deviation in gas lift allocation to one of their producers due to a faulty meter.

Accurate gas lift metering is vital for optimum production and allocation of lift gas. In-line meters are often not accurate, while calibration of those in the field is a challenging task.

#### RESULTS

ScanWell surveyed 6 producing gas lifted wells on the installation. The first 5 wells had a deviation of 1.3% between the measured rate provided by ScanWell and the value from in-line orifice.

As the client suspected the sixth orifice meter had deviation of 48% and had to be serviced or replaced.

#### SOLUTION

ScanWell offered the operator to verify the in-line measurements of the lift gas rate by tracer dilution method.

The method is a highly accurate direct measurement which provides the flow rate by injecting a tracer into lift gas supply and measuring its concentration downstream.

#### CLIENT VALUE

Based on the data from the study the client was able to pinpoint the issue resulting in the mismatch of lift gas allocation data, and further optimize the producer.

The survey resulted in an uplift in production and reduction of resources used to identify the problem.

#### QUICK FACTS

##### Where

North Sea

##### When

October 2018

##### What

Tracer Dilution Method

##### Duration

2 hours

##### Crew

1 engineer

##### Equipment

3 handcarried pelicanses

##### Tracer Medium

Nitrogen