

Cognite Use Case Examples

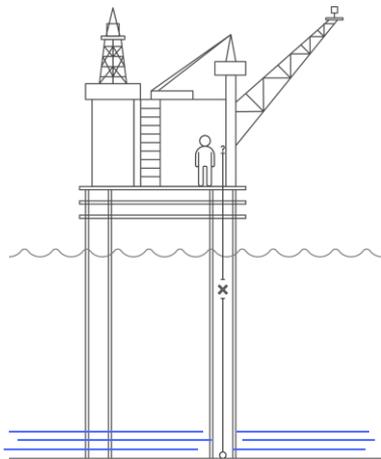
 **Sumitomo Australia Pty Ltd**



Cognite Deploys Virtual Flowmeter to Advance Well Monitoring for Aker BP

CHALLENGE

High porosity and low permeability result in an extremely high risk for chalk influx and significant subsequent production losses every year at Valhall field.



SOLUTION

The Turbulent Flux virtual flow meter (vfm) uses live sensor data to automatically calibrate simulator results in a solution that quickly adapts to changes in inflow conditions from the reservoir to the well.



IMPACT

Increased insights into the fluid flow help the petroleum engineers and field operators to plan and make correct decisions. The impact is higher production and fewer mistakes. Real-time information about fluid flow enables better and faster decision-making.



\$475-950 K
Annual Projected Savings



Increased production by using live data to monitor current fluid conditions

CHALLENGE

Optimize offshore operations on the Ivar Aasen platform to reduce wasted time, resources and manpower

01

WHY

Significant production losses tied to bottlenecks based on a fixed value in the Alvheim Separator

02

WHAT

Increase utilization by modelling dynamic max flow restrictions for 1st stage separator during MPFM calibration on Alvheim

03

VALUE POTENTIAL

20-40 MNOK/yr

SOLUTION

ALVHEIM DYNAMIC MAX FLOW

During MPFM calibration of flowlines, production through the Alvheim separator is limited by a fixed value, thought to be too conservative. The new tool determines maximum production limits based on current fluid conditions.



IMPACT

Live data visualized and operationalized through Grafana empowers operator to determine max production limit based on current fluid conditions, increasing production



\$ 1.9 - 3.8M

Per year
For a separator on Alvheim



30%-50%

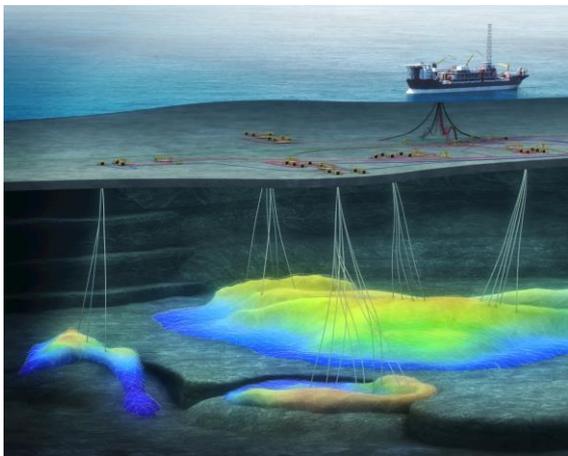
Reduction in deferrals associated with MPFM calibration



How Cognite and Aker BP secured correct allocation of oil and gas at Alvheim with minimal production loss

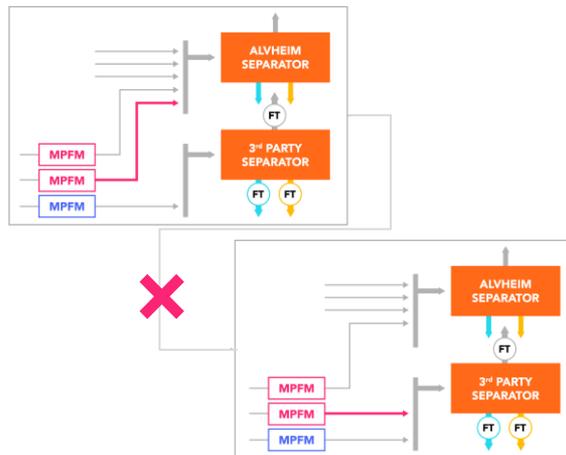
CHALLENGE

Accurately monitor flow and calibrate multiphase flow meters (mpfms) to ensure correct allocation to all operators.



SOLUTION

Algorithm-based calibration replaces rerouting third-party lines, dramatically reducing deferrals and losses.



IMPACT

Estimated annual savings from optimizing the calibration process



\$3.5 M

Estimated annual savings from optimizing the calibration process



wintershall dea

How Cognite Data Fusion streamlined maintenance work for Wintershall Dea

CHALLENGE

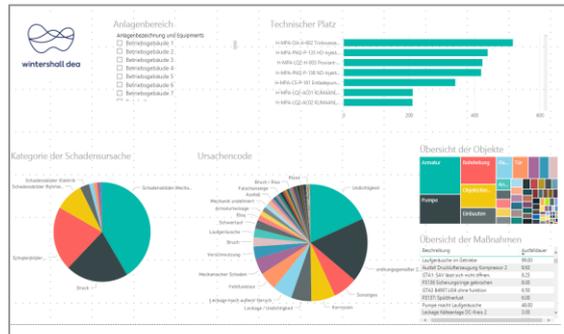
Provide a holistic overview of wintershall dea's maintenance activities

SOLUTION

Dashboard aggregates factors that cause equipment failure, reliability metrics, and detailed cost breakdowns

IMPACT

Dashboard improves wintershall dea's overview of its assets, enabling data-driven decisions about maintenance work



10 hours

Hours saved per week

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