

Norway

Automated cuttings management system helps operator trim service costs by \$1.4M

BaraStream® waste management system streamlines critical process, mitigates operational risks, and reduces personnel onboard

CHALLENGE

- Improve cuttings management system to reduce personnel onboard (POB) and overall costs
- Mitigate “line of fire” risks
- Advance efforts to create a more digitized drilling process

SOLUTION

- The operator and Halliburton enhanced the BaraStream® cuttings handling system to automate the process with remote control and monitoring capabilities

RESULT

- Personnel onboard reduction on the rig and vessel
- Reduced risk exposure for operations crews
- Enhanced wellbore data and intelligence
- Reduced service cost by \$1.45 million



The offshore customer requested an automated cuttings handling system to reduce their safety risks. Halliburton's honeycomb (HCB) tanks, shown above, are a key part of our BaraStream® waste management system.

Overview

A Norwegian customer requested automation to help mitigate operational risks with the reduction of personnel on deck and improvement of operational efficiencies with the BaraStream® waste management system.

Challenge

Offshore Norway drillers face multiple challenges to deliver safe, compliant (environmental regulations), and efficient operations. For example, a typical workday includes the manual operation of equipment by people. This presents potential for exposure to “line of fire” risks, such as noise, dust, fumes, etc. Operators challenged Halliburton to develop and implement an automation solution to mitigate these risks and help reduce personnel onboard (POB).

Solution

The customer and Halliburton collaborated to improve the cuttings handling system on the semi-submersible rig. This effort helped improve the BaraStream® waste management system already in place on the rig.

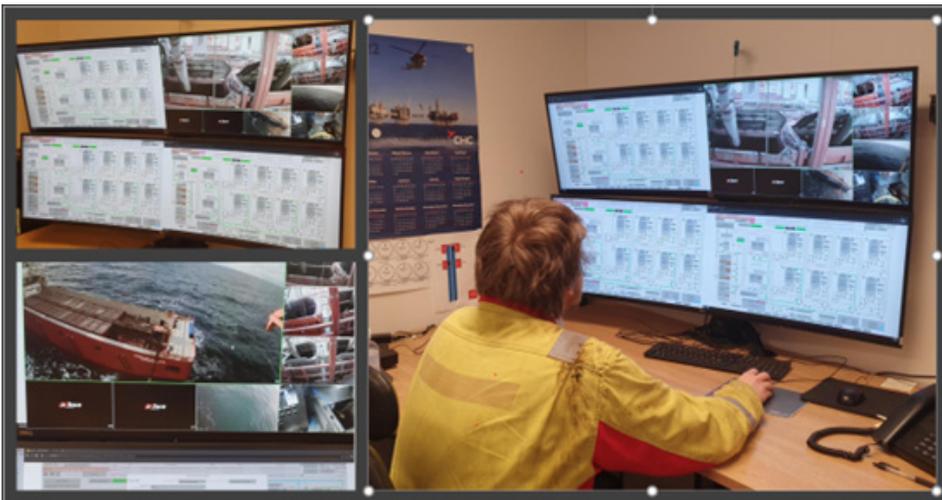
The improvements focused on four key areas:

1. **Sensors:** Cuttings tonnage, control, and measurement of lubrication volumes with an array of sensors and purpose-designed interface
2. **System controls:** Retrofit the HCB tank array with controls for remote operated valves and automation of the lineup of flow and transfer of cuttings with a machine learning solution; manual backup capability in place
3. **Monitor:** Installation of weight measurement sensors and video cameras to monitor the “skip and ship” process
4. **Rig to vessel:** Remote management for cuttings offload to vessel-based cuttings transfer tanks (CTT) with remote operated valves and cameras

Results

The digital approach delivered a multitude of benefits to the customer.

- The automated flow control helped reduce personnel onboard (POB) and facilitated the move of other personnel away from the “line of fire” risks
- Reduced onboard personnel requirements for the supply vessel for CTT operations
- The software program included best practices that incorporates previous learnings and experience, weight control, and real-time modeling of cuttings left in hole, mass-balance, and hole cleaning prediction
- Reduced exposure to risk for the operations crews
- Digitalization facilitated how data is gathered and shared between different services to aid with real-time monitoring of hole cleaning
- This solution is part of the journey toward remote managed systems at the wellsite. It is also a building block in Halliburton’s remote management and automation strategy



The BaraStream® live, remote waste management system delivers critical insights and benefits to operators. For this Norwegian customer, the BaraStream® system helped reduce personnel onboard and total cost of operations.

For more information, contact your local Halliburton representative or visit us on the web at www.halliburton.com

Sales of Halliburton products and services will be in accord solely with the terms and conditions contained in the contract between Halliburton and the customer that is applicable to the sale.

H014768 © 2024 Halliburton. All Rights Reserved.