## FluidControl Case Study

# BRANDT<sup>™</sup> FREEFLOW<sup>™</sup> Positive Pressure System Provides Safe and Enhanced Solution for Waste Transfer

#### Challenges

- Handle storage and transfer of a large amount of cuttings safely and efficiently
- Meet strict environmental regulation of North Sea
- Limited space availability at the rig site

### **Well Information**

- Location: North Sea
- IOC

#### **Solution & Results**

- Our BRANDT FREEFLOW Positive Pressure System, enabled the operator to store and transfer drilled cuttings from under the shakers to almost any location on the rig
- Contained cuttings throughout the process to ensure reduced exposure hazards
- Elimination of crane lifts, greatly increasing safety of operations
- Reduced cuttings handling costs
  Low cuttings exit velocities via monitored line pressure and

automatic transfer rate adjustment

4310 N Sam Houston Pkwy East Houston, Texas 77032 United States Phone: 713 482 0500 Fax: 713 482 0699









NOV FluidControl's cuttings transfer solution enabled safe and efficient waste management during the drilling of a well for an operator in the North Sea.

The operator wanted total containment for cuttings on the rig, but lacked the necessary space. Any solution for cuttings transfer would require the capability of handling cuttings generated from drilling a large section for an offshore well.

NOV installed the BRANDT FREEFLOW Positive Pressure System, capable of storing and transporting drilled cuttings from below the shakers to almost anywhere on the rig. The system handles the operator's cuttings from collection and storage, all the way to final disposal.

The package included:

- Two Air Conveyers
- Four slider tanks
- An additional 16 slider tanks on a vessel for storage
- Skip loading boom
- Three screw conveyersCompressor
- Vacuum unit
- vacuum unit

Air conveyers were installed with pipework connecting them to four slider tanks for storage. Discharge pipework was installed to tie in with cuttings hoses on both sides of the rig, allowing discharge of cuttings to additional slider tanks onboard the boat from either side of the rig.

Three screw conveyers were installed throughout the system to carry cuttings from the shakers to the air conveyers and contingent skip station. After leaving the shakers, cuttings were never exposed until inside the thermal plant onshore, reducing hazard and risk of spillage. No downtime was recorded throughout the well.

The FREEFLOW system reduces the operator's need for frequent lifts associated with conventional skip and ship operations, which increased overall safety of operations. Additionally, because cuttings can be conveyed virtually anywhere on the rig, cuttings can be collected and stored in areas that do not interfere with ongoing rig operations.

Contact a NOV FluidControl representative to learn more about BRANDT FREEFLOW Positive Pressure System and other waste transfer and containment needs.

©National Oilwell Varco - All rights reserved - D8C1004591-MKT-001 Rev. 01



FluidControl@nov.com