

K-BOS & SWDP

Presentation to Havtil 's Well Control Day - 19.02.2025

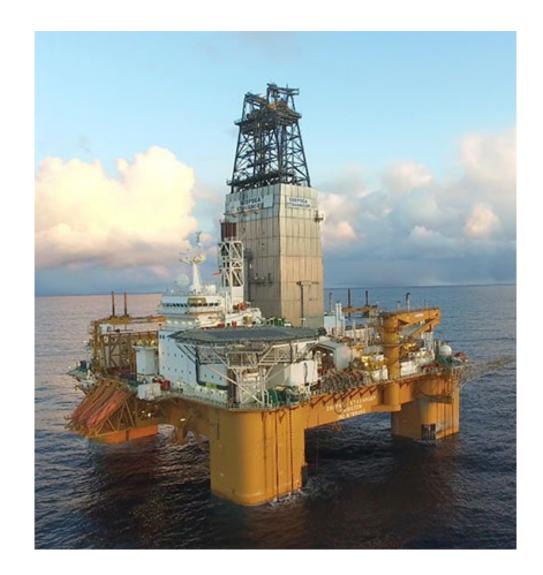




Background

K-BOS integration on Deepsea Stavanger

- Deepsea Stavanger
 - 5 year contract with Aker BP
 - Contract start & SPS in 2025
 - Attractive rig & Competent organization
 - Long term relationship Odfjell & AkerBP
- Safety initiative
 - Improved Shearing capabilities
 - Instantaneous
 - Seal functionality
- Enabler for Shallow water Dynamic positioning
 - Business case enhancer for K-BOS



K-BOS Technology

Kinetic Blowout Stopper

- Pyro-mechanical gate valve
 - Shear the string in milliseconds (<0.1 sec vs. 18+ sec)
- K-BOS can shear "anything"
 - Seal in same operation
- Proven technology
 - DNV qualified
 - Installed and in operation
 - 23 units delivered worldwide
 - 12 Subsea systems
- DSS First system for NCS

KINETIC BLOWOUT STOPPER

Shear Anything | Seal Instantly | Ultimate Reliability

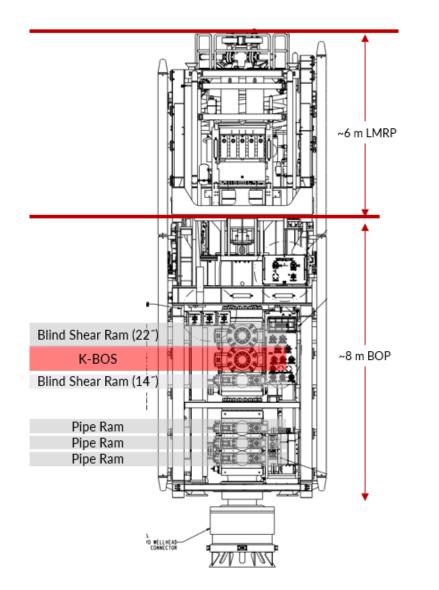




DSS Integration

Integration of K-BOS on Deepsea Stavanger

- Retrofit Kit for NXT BOP
 - Substitute Casing Shear Ram with K-BOS
 - Blind Shear Ram functionality maintained
- Integrated in NOV control system
 - Use NOV control system for activation
 - Minimal changes to HMI & Procedures
- K-BOS control system used for monitoring only
 - Continuous real time loop testing
 - Diagnostic function testing
- Establish additional K-BOS EDS sequences
 - Maintained existing EDS sequences
- Back-up
 - K-BOS secondary kit system available
 - Re-convert to original NOV CSR configuration



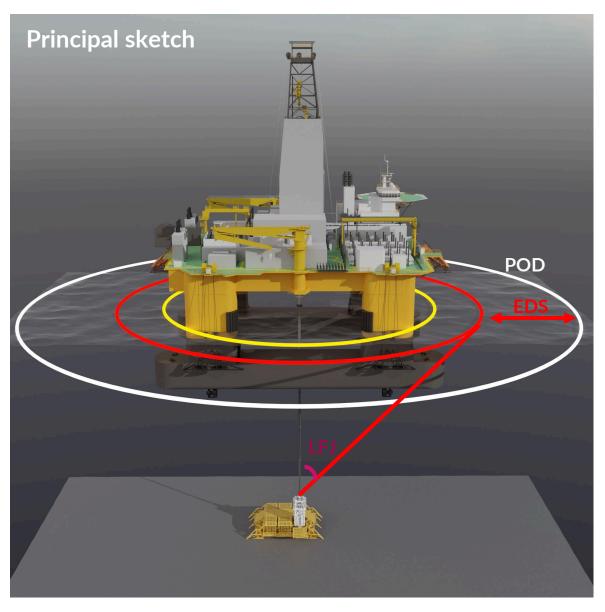
AkerBP



Shallow Water DP

Shallow water Dynamic Positioning

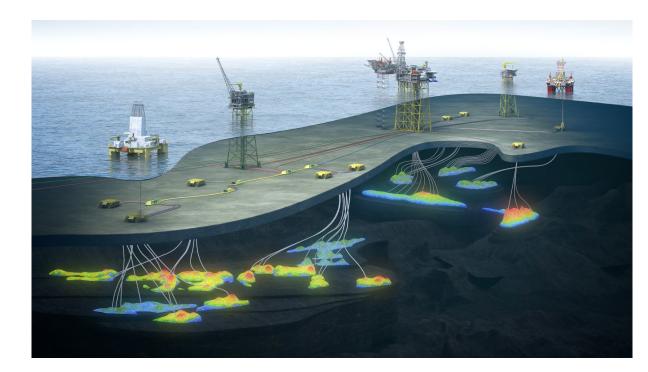
- Semi-sub drilling operations
 - Moored for shallow water (70 300m)
 - Dynamically positioned (DP) on deeper water (>300m)
 - DP normally preferred where possible
 - Risk reduction; no mooring-lines or AHV operations
 - Cost & Flexibility
- Yggdrasil water-depth 105-120m
 - Significant share of Aker BP subsea wells below 150m
- FEED studies performed in 2024
 - Possible to operate DSS on DP > 100m water depth
 - Maintain existing DP footprint limits
 - K-BOS is enabler for SWDP
 - Reduce total EDS time from 33 sec+ to 3-5 sec



Safety, operational and economical benefits

Main benefits with K-BOS & Shallow Water DP

- K-BOS Safety and operational benefits
 - Increased shearing capabilities
 - Shear all planned drill-string components
 - Shear in milli-seconds.
 - Seal in same operations
 - BSR seal after disconnect maintained.
 - Continued monitoring vs regular function testing
 - Enabler for Shallow Water DP
 - DSS installation Q2-Q3 2025
- Shallow water operational and economical benefits
 - Remove need for mooring spreads and mooring operations
 - Increase flexibility for SIMOPS and well backup activities
 - Optimized heading possibilities
 - Less total CO₂ emissions for single wells
 - Strong long term business case
 - SWDP start operation 2H 2025







www.akerbp.com