Virtual witness of full-scale testing using Subsea Live

Schlumberger Digital Forum

Richard Crichton
Project Manager
Ormen Lange Subsea Compression
Ormen Lange Field

75 to 85%  
Improved recovery factor

300 MMBOE  
Additional production

60%  
Reduction in costs vs topside option

Low CO2 Intensity
Ormen Lange Subsea Compression

12,000 m³/h 32 MW 120 km ~900 m
Capacity per compressor Compression system Stepout Water depth

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The Challenges – Work In Progress

- High stakeholder interest
- Widespread locations
- COVID travel constraints
- Challenging timeline
The Outcomes - Technical

- Compressor testing and software verification test (SVT) witnessed remotely
- Physical test performed at Horsøy with robust COVID controls maintained
- Real-time data available in Subsea Live for all participants

Compressor test loop

Subsea Live as seen in the Control Room
The Outcomes – One Team

- Achieved Goal Zero with significantly reduced HSSE exposure
- Real-time collaboration across Shell, OneSubsea and Joint Venture partners
- Full alignment on test acceptance achieved in short timeline supporting early FID
The Outcome - Business

- Joint Venture partnership alignment
- Early Final Investment Decision (FID)
- Secure capacity in supply chain
- Regulatory submissions complete
Future Potential

- Continue to support project delivery
  - Equipment testing (Power / System Operating Test)
  - Commissioning
  - Start-up and operation
- Enhancing capability for field surveillance
Conclusion

- Digital tools are not new
- Value arises from ways of using the existing tools
- Single source data available in real time
- A structured way to access and present data to optimize future operation of equipment
Unlocking Value, Enabling Low Carbon
The End Customer
Questions and Answers