

Intelligent well control panel systems



Client:

Baker Hughes and Aker Solutions

Location:

Norwegian Continental Shelf

Equipment:

2 x Proserv intelligent well control panel systems

Project duration

Panel 1 - 38 weeks

Panel 2 - 38 weeks



Project Background

Proserv has an extensive track record in the design, manufacture and delivery of Intelligent Well Control Panel Systems to clients around the world.

Based on this expertise, and our longstanding relationships with Baker Hughes and Aker Solutions, Proserv was awarded a contract for the supply of two remotely operated Intelligent Well Control Panels for new platforms, Ekofisk 2/4 Zulu and Eldfisk 2/7, both operated by ConocoPhillips and situated in Scandinavian waters, North Sea.

Solution

Specialist engineering and project teams were put in place to ensure the effective management and delivery of this project. Whilst the contract was awarded to the team in Stavanger (Norway), the project was executed from Aberdeen (UK), with the panels manufactured and assembled in our Centre of Excellence (CoE), Dubai (UAE), and then delivered to Stavanger for final assembly and testing.

Scope

Proserv was responsible for the design and engineering of hydraulically-controlled Intelligent Well Control Panels for interface with Baker's Intelligent Well Completion System and SCADA computer hardware. The panels had the capability to control 20 wells, with each well able to

control a 10 zoned completion with inflow control valve and choking capabilities, essential for optimising production levels. Once the sub-assembly of the panels were completed in Dubai, they were shipped to Stavanger for factory acceptance testing (FAT). This process was carried out at Proserv's facility, with Baker Hughes in attendance, to ensure equipment compatibility and compliance with all contractual specifications.

Conclusion

Proserv successfully delivered the project on-time and within budget, whilst ensuring strict compliance to the highest QHSE standards. The client acknowledged Proserv's systematic approach and high quality of work on this project which has further enhanced the relationship for future collaboration.

The Benefits

This project required complex engineering to meet the client's exact design specification and within a fixed time frame of 30 weeks (from concept to delivery).

With the remote monitoring and control capabilities, quicker changes can be made to the well settings without mobilising an operations crew. Proserv was able to strengthen its team of multi-disciplinary technicians and engineers through an intensive recruitment drive which will support the company's future order pipeline. Through the cross-sharing of knowledge and expertise across the company, clients benefit from high quality products and services, with improved lead times, at the best price.

"The two panels developed as part of this extensive Intelligent Well System completion programme are probably the most technically advanced panels engineered and delivered as part of this project to date. Both panels were successfully built, tested and delivered on-time to exact specification."

Frank Erikson, Product Line Manager
Baker Intelligent Production Systems