

Subsea Sampling Production Optimisation

Client:

BP

Location:

Angola

Equipment:

Subsea sampling system

Project Background

BP commissioned Proserv to design, manufacture and supply a subsea sampling system capable of capturing reservoir fluid samples from subsea manifolds located in water depths of up to 2,500m to support their operations on Block 31, offshore Angola. This award was based on the success of the previous Block 18 subsea sampling system delivered in 2007, which is still in use today.

Solution

A project delivery team was established involving design engineers, project managers, planners, buyers and technicians, who all worked closely to deliver this project to exact design specifications.

The system was manufactured and successfully tested at Proserv's specialist subsea facility in Aberdeenshire before being shipped to Luanda within one year of the PO being placed.

Scope

The system was designed to meet the following parameters:

- Deployed via a crane from a vessel
- Manually operated via ROV
- Sample from two separate wells in one deployment
- Connected to manifold via client specified Unitec Connector

Conclusion

Proserv's subsea sampling system successfully completed full and detailed FAT testing under the careful scrutiny of BP's QA/QC Inspector. It is now awaiting first deployment in the field where it is expected to be used for many years to come.

Benefits

- Samples two wells in one single deployment
- Easily deployable and retrievable system, which enhances reliability and reduces the need for maintenance and repair throughout field life
- Fully compliant with NACE
- Meets engineering standards set by the American Petroleum Institute
- 20 year design life
- Monitors water salinity and corrects multi-phase flow meter calibration

