

Contract: Greater Plutonio FPSO
Client: BP
Location: Block 18 Offshore Angola



Challenge

To provide warranty and marine assurance to one of the most expensive and geographically diversely constructed FPSO and five field developments in recent years. Remit included cross project assurance including but not limited to, critical design, planning, lifting and installation phases.

Expertise provided

- Vessel vetting and approval of over 50 vessels involved in the project, from Dynamic Positioning (DP) installation vessels, to ocean tugs, to Surfer crew-boats. Locations for vessel audits included, USA, North West Europe, Singapore, Korea, Japan and West Africa
- Auditing and supervising trials of DP vessels
- Investigating incidents involving DP failure of installation vessels
- Pro-activity in all aspects of the project's Hazard Identification and Risk Analysis
- Flag state compliance
- Verification of installation analysis (flexibles and risers)
- Verification and analysis of FPSO mooring system
- Installation and integration of 12 FPSO modules to hull
- RAO calculation and verification for the major installation vessels
- Approved short and long tow of FPSO from Korea to location

- Approved all marine and cargo loadouts and transportations. Loadout locations included, UK, Denmark, Norway, South Africa, Spain, France, USA, Japan
- Consultancy services for Floatel acquisition and management
- Provide ongoing marine advisory services to client in Angola

Outcome and benefits

Noble Denton was able to develop rational, risk assessed solutions for what was a pioneering venture using FPSOs in one of the world's harshest environments.

As marine warranty surveyors we were able to act on BP's behalf to ensure that all operations contractors completed the installation and hook-up operations without incidents.

During the operational phase the combination of our engineering and marine expertise was brought to bear on new and challenging requirements for production enhancement and offloading integrity.

Despite the complexity of the operation, the mooring line replacement and re-tensioning were completed on a fast track basis without any injuries, securing recognition for professionalism and innovation from BP.