

BC-10

PROJECT OVERVIEW

Seven Seas and Seven Oceans alongside on BC-10



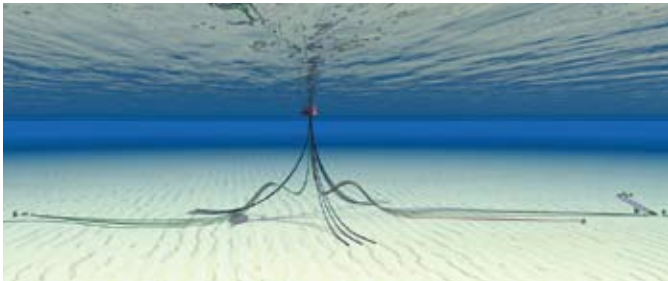
Engineering, fabrication and installation of pipelines, risers and jumpers and installation of umbilicals and manifolds for the development of the BC10 fields, in the Campos Basin offshore Brazil.

Project scope included the following elements:

- 11 steel pipelines, (130km)
- 7 steel lazy-wave risers (21km)
- 3 dynamic and 2 static umbilicals (55km)
- 4 manifolds
- 25 rigid jumpers

LOCATION

BC-10 is located in the Campos Basin, offshore Brazil, approximately 120 km southeast of Vitoria in water depths between 1600 and 2000 metres.



BC-10 field schematic

CLIENT

Shell Brasil Ltda

PROJECT DURATION

January 2007 to July 2009

Contract awarded	December 2006
Riser Fabrication completion	February 2009
Flowline Fabrication	April 2009
Offshore Construction completion	June 2009

ASSETS

Vessels Seven Oceans, Seven Seas, Seisranger
 Spoolbase Ubu Spoolbase



Seven Oceans Laying pipe and Seisranger performing touch-down monitoring



Seven Seas installing long umbilicals

SCOPE OF WORK

In December 2006 Subsea 7 was awarded the engineering, fabrication and installation contract by Shell Brasil Ltda for the development of the BC-10 field. The project commenced in early 2007. The field was developed with a centrally located FPSO, Espirito Santo, using an internal turret and subsea wells producing through manifolds, subsea pressure boosting, flowlines and risers. The project included the fabrication and installation of the world's first lazy-wave steel catenary risers.

BC-10 enjoyed the single honour of being the first Subsea 7 project to welcome both of the company's new flagship pipeline installation vessels, the Seven Oceans and the Seven Seas.

In water depths of 2000 metres, the Subsea 7 scope of work involved:

- Installation of 11 steel pipelines totalling approximately 130km
- Fabrication and installation of 7 steel catenary lazy-wave risers, totalling approximately 21km.
- Transportation and installation of three dynamic and two static umbilicals totalling approximately 55km
- Installation of 4 manifolds
- Fabrication and installation of 25 rigid jumpers

Subsea 7 worked to very strict welding criteria on elements like the steel catenary risers. The pipeline procedures were successfully developed in-house between Subsea 7's Pipeline Production Group and Central Engineering departments.

As a further indication of Subsea 7's commitment to the Brazilian market, all engineering and project management was conducted in the company's Brazilian offices, with a high proportion of local engineering talent in the project team.



Installation of the world's first lazy-wave steel catenary risers.