

SÉPIA FIELD - SANTOS BASIN, BRAZIL:

FPSO Carioca MV30 Spread Mooring



Scope of Work

SOFEC is responsible for the design and procurement of a spread mooring system for the FPSO Carioca – MV30 which will be deployed at the Sépia Field in Santos Basin, offshore Brazil.

The FPSO will be capable of processing 180,000 barrels of crude oil per day, 212 million standard cubic feet of gas per day, 240,000 barrels of water injection per day and has a storage capacity of 1,400,000 barrels of crude oil.

The FPSO will be able to accommodate a total of 51 flexible risers and umbilicals. The FPSO is also able to accommodate 21 steel risers instead of the 21 flexible pipes serving the production / gas injection wells.

The SOFEC spread mooring system will be ABS classed.

General Description

Client Name: Contract Award: Installation Date: First Oil: Vessel Size: Petróleo Brasileiro S.A. (Petrobras) October 2017 Planned for Q2 2020 Planned for Q2 2020 282,000 mt Storage Capacity: Water Depth: 1,400,000 bbls 2,140m (7,021ft)

Design Environmental Criteria (100-year storm)

Sig. Wave Height:	11.6 m (38.06 ft)
Wind Velocity:	34.51 m/s (67.08 kts)
Current:	1.67 m/s (3.25 kts)

Mooring System

4 x 6 mooring system consisting of chain and polyester rope. Torpedo piles and pile chains are supplied by Petrobras.

Riser System

- 8 Oil Production Risers
- 3 Oil Production / Water Injection Risers
- 11 Gas lift / Service Risers
- 10 Water / Gas Injection Risers
- 1 Gas Import / Export Riser
- 16 Control Umbilical
- 1 SESDV Control Umbilical
- 1 Fiber Optic Cable