

[Return to profile](#)



## **SANHA / BOMBOCO, OFFSHORE CABINDA, ANGOLA**

The Sanha development lies in Block 0, offshore Cabinda in West Africa, in 75m to 200m of water. The \$1.4 billion condensate project is based on a number of fields feeding new facilities on the Sanha field, with LPG connected to a purpose-built FPSO located 30 miles offshore Malongo Terminal.

Combined production from Sanha and the nearby Bomboco field is expected to reach its average annual peak of 100,000b/d of oil, condensate and LPG by 2007.

Chevron Texaco's Angolan affiliate, Cabinda Gulf Oil Company (Cabgoc - 39.2%), operates the block on behalf of its partners, including Sonangol (41%), Total (10%), and ENI (9.8%). Cabgoc and Sonasing (a joint venture between Sonangol and SBM) are to share in the operations of the Sanha LPG FPSO. The Sanha will receive LPG for processing into butane and propane from two adjacent platforms, Sanha PCP and F-GP, before offloading to shuttle tankers.

### **DEVELOPMENT**

Block 0 consists of three areas. Area A has 16 developed fields grouped into three complexes: Malongo, Kambala / Livuite and Takula. Gas injection has been introduced at Malongo where NGLs are stripped out on the FGIP compression platform on Malongo West.

Area B includes the Kokongo field based on two platforms, one of which, East Kokongo, is included in the Sanha condensate development. This large processing platform forms a transportation hub for all Areas B and C fields.

Area C includes the North N'Dola and South Sanha facilities. North N'Dola's platform is a 16 well-slot facility in 80m of water with a 20,000b/d processing capacity. Crude is exported to East Kokongo while excess gas piped to a flare tower on the 16-slot 40,000b/d South Sanha installation, a 5,460t topsides sitting on a 1,500t jacket.

The Sanha condensate project is based on a platform complex in the central Sanha field consisting of a remote flare jacket and process compression installation (PCP), a drilling production platform and a living quarters platform all bridge-linked together. A cryogenic LPG plant on the PCP feeds into the Sanha LPG FPSO located 5km northeast. Any dry residue is compressed and reinjected into the Sanha gas cap.

The new wellhead platform on Bomboco field came onstream in 2005, exporting to East Kokongo.

### **SANHA LPG FPSO**

With an LPG storage capacity of 135,000m<sup>3</sup> in six tanks and a daily processing capacity of 6,000m<sup>3</sup>, the Sanha LPG FPSO is the largest LPG hull ever built and the first floating production facility built to combine all LPG processing and export functions onboard the same unit.

The LPG production plants will include gas separators, gas refrigerators and boil-off gas reliquefaction units. Mixed LPG, received from two LPG production platforms in Block O, will be fractionated onboard the FPSO to separate butane and propane products. Each product will then be chilled for storage in atmospheric pressure storage tanks and periodically transferred to LPG export tankers for shipment and sale.

Built by Mitsui and IHI on behalf of Sonangol / SBM's joint venture Sonasing, the double hull vessel has an overall length of 264m (230m bp), a beam of 49m and a 29.3m moulded depth. It has a deadweight of 92,743t and an IMO Type B (full refrigerated at -50 °C / 0.45barg) containment system.

Lying in a 58m waters, it is moored using a 3 x 3 arrangement. The riser arrangement includes two 6in LPG risers, a 4in gas riser and an umbilical. The transfer system includes two 6in toroidal swivels, an electric swivel and a 4in pipe swivel. The incoming gas is loaded at a rate of 10mmscfd at a nominal flowing pressure of 605psig at 65 °F.



**The Sanha LPG FPSO is the first floating production facility to combine all LPG processing and export functions onboard the same unit.**



**The Sanha development lies in Block 0, offshore Cabinda in West Africa, in 75m.**



**Mixed LPG will be fractionated onboard the FPSO to separate butane and propane products.**



**The butane and propane products will be chilled for storage and periodically transferred to LPG export tankers for shipment and sale.**



**The Sanha LPG FPSO has an LPG storage capacity of 135,000m<sup>3</sup> in six tanks and a daily processing capacity 6,000m<sup>3</sup>.**

[Return to profile](#)