



## Design, manufacture & supply of a built to specification IWOCs HPU

### THE ISSUE

The Bonga North West (BNW) Project was a complex brownfield subsea tie-back to the moored Bonga Main floating, production, storage and offloading (FPSO) host facility. Shell Nigeria Exploration Company (SNEPCO) needed a backup hydraulic power unit that will support safe and efficient installation, intervention and completion work on subsea wells

### PROJECT SCOPE

Ofserv was awarded the contract to:

- ◆ Design, Build, QA/QC, Factory Acceptance Test (FAT) the IWOCs HPU to specifications Inc. all hold & monitor points
- ◆ Project Management & Documentation
- ◆ Logistics (Freight & Insurance)
- ◆ Site Receipt & Inspection
- ◆ Supply of backup critical parts
- ◆ Preservation, Operations & Maintenance

### OUR SOLUTION

Working with US based Protec power, a specialist manufacturer of modular skid mounted Oil & Gas equipment, Ofserv set out to maximize Nigerian content input on the project. The IWOCs HPU was designed and certified in accordance with DNV 2.7-1 / 2.7-3 and meets IEC 60079 Class 1, Zone 2 hazardous area classification requirements. The HPU meets NAS 1638 Class 6/SAE AS4059C Class 6 (B-F) cleanliness levels. All metallic material in contact with the hydraulic fluid is 316, 316L stainless steel. The hydraulic fluid reservoir is 316 stainless steel (75 gallons). The structural frame is 316 SS tubular construction. There is a 5,000 psig low pressure circuit with one 5-gallon bladder type accumulators and 2 air driven piston pump. There is a 16,500 psig high pressure circuit with one 2.5-gallon piston type accumulator and 2 air driven piston pump with 1-remote pedestal manifold for HP & LP outlet.

In executing the project, Ofserv maintained sole responsibility for the project management, documentation, review of design basis, QA/QC, Logistics, In-country SRI, preservation & Operations / Maintenance of the HPU contributing over 25% to total project manhours. Project was delivered successfully within scope, budget and schedule parameters to the client's satisfaction.



#### Location

Houston, USA & Port-Harcourt, Nigeria

#### ManHours

3,218

#### Facilities

Bonga FPSO

#### Safety Statistics

Zero LTI

#### Status

Completed 2Q 2014