

# DEEPWATER

## ICCP RETROFIT: ZAFIRO PRODUCER FPSO, EQUATORIAL GUINEA

### Deepwater designed and supplied an Impressed Current Cathodic Protection system for ExxonMobil's Zafiro Producer FPSO

After a 2004 ExxonMobil engineering review of all available options, Deepwater's RetroBuoy™ ICCP system was chosen to retrofit the cathodic protection on their Zafiro Producer FPSO located offshore of Equatorial Guinea near the Nigerian border. Two 400 amp RetroBuoys™ were installed using a dynamic supply cable system between the anode sleds on the bottom and the FPSO deck.

The Zafiro Producer was retrofitted by lowering the RetroBuoys™ to the seabed and hanging a dynamic power cable from a custom-built porch with an integrated rectifier power unit.

The offshore installation of the sleds took two days, and field time was ten days; total output was around 300 amps. CP readings afterward ranged from a minimum hull potential of -995mV to a maximum of -1050mV.

More info at [www.stoprust.com](http://www.stoprust.com)



**ZAFIRO PRODUCER FPSO**

The vessel is located 42 miles west/northwest of Bioko Island, Equatorial Guinea



**SUPER BUOY IN FLIGHT**

A RetroBuoy™ is loaded onto the work boat.



**TWO RETROBUOYS™ IN TWO DAYS**

Deep Down Inc. provided procedures and management for the installation..



**ABLE TO CABLE**

The cable deployment reel system aboard the work boat.



**HANGING OUT ON THE PORCH**

The dynamic cable system was hung from a custom-made porch.