

**DOF SUBSEA  
CHALLIS FIELD**

**FPSO and SALM Abandonment Engineering, Timor Sea**

ICON Engineering was engaged by DOF Subsea to provide engineering services for the abandonment of the Challis field. The disconnection of the FPSO from the Single Anchor Leg Mooring (SALM) was completed in December 2010.



Challis FPSO

**Abandonment Method**

The abandonment method chosen was to use explosives to sever the two side arms connecting the FPSO to the SALM. One tug would be attached to the stern of the FPSO to pull the FPSO away from the SALM.

Two other tugs would be connected to the side arms and pulling outward to prevent the arms swinging into the FPSO.

The side arms would be attached to the side of the FPSO via rigging so they would swing back under the FPSO once cut, before being disconnected and left on the seabed.

The FPSO would then be towed out of field and the SALM topped by flooding and left on the seabed.



SALM ladders and platforms

**Abandonment Engineering**

The scope of engineering work included design of:

1. FPSO and SALM yoke remnant restraints to catch 200Te sections of yoke that remained attached to FPSO and SALM as side arms severed.
2. SALM ladders and platforms for access once FPSO out of field.
3. Yoke remnant hang off points and restraints on FPSO and SALM.
4. Tow bridle and rigging attachment goals posts and hang off point.
5. Winch bases and davits



FPSO Yoke remnant

**Offshore Support**

ICON provided offshore support to witness the installation of all ICON-designed equipment.



SALM Yoke remnant