

## Removal offshore installations

### Disposal Gullfaks SPM 1 & 2 – Loading Buoys for Scanmet AS

Two nearly identical loading buoys have to be scrapped in a safe and environmental friendly way. The total SPM is approx. 170m high and weights approx. 6050 tonne. The steel structure consist of a buoyant cylindrical column, 8m in diameter.

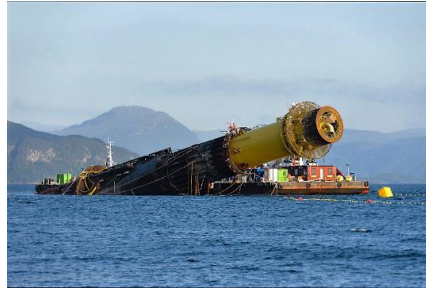
First the topside will be lifted off with a floating crane and than the substructure will be tilted to a horizontal position by means of pumping water ballast. After the fixed ballast is removed from the lower compartment afloat, the substructure will be dragged on a slipway for further scrapping.

#### Scope

- 3D Modelling (Inventor) for simulation purposes and weight + cog control
- Definition / estimation of weights and COG's from existing documentation
- Hydrostatic analysis SPM during top side lifting
- Design pad-eyes for top side lifting
- Hydrostatic analysis tilting operations by means of pumping water ballast
- Analysis global strength and buckling substructure during tilting operation
- Hydrostatic analysis confirming safety during iron-ore removal afloat

Analysis are performed according Statoil requirements and DNV Marine operations and standards 2014

# Marine Operations



SPM after tilting



Gullfaks SPM cutting at slipway

