

Project:

# R&D CONCRETE FLOATING PRODUCTION FACILITIES

**LOCATION:**

East Coast Canada

**YEAR:**

2014-2016

**CLIENT:**

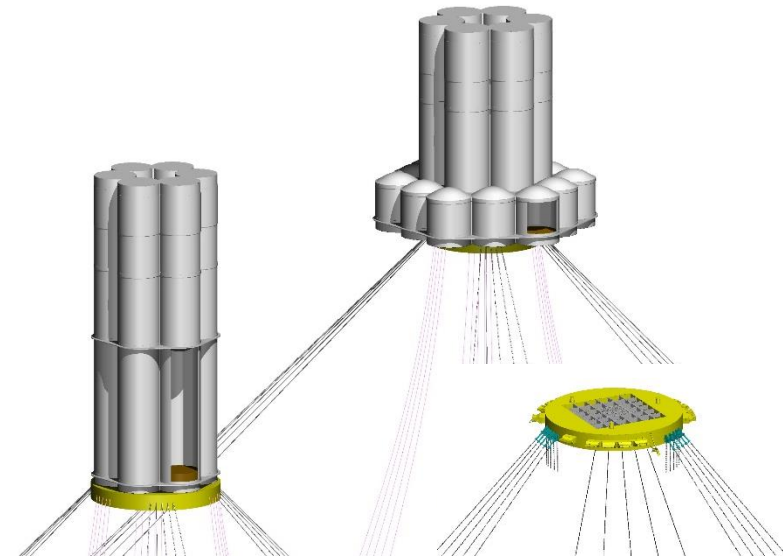
Technip Canada

**SCOPE/PHASE:**

Concept development

**PROJECT RESPONSIBLE:**

Trond Landbø



**Project description:**

Dr.techn.Olav Olsen (OO) has participated in this R&D project together with a number of participants, under the project administration of Technip Canada. OO's scope of work has been development of disconnectable concrete floater hull for Eastern Canada in 1200 m waterdepth (Flemish Pass used as case). The hull contains 1.4 mmbbls oil storage and is supporting a topside of 32 000 tonnes. Two floater types have been developed; Spar and SEMO (Semi submersible Monohull) due to their favourable motion characteristics and ability to support Steel Catenary Risers (SCRs).

Special focus has been on development of a disconnectable floater due to large icebergs in the area. Novel design of riser/mooring buoy supporting SCRs and connected to a taut leg mooring system has been developed. The objective was to prove safe and quick disconnect in bad weather, providing a safe platform alternative in areas with large icebergs. Aim has also been to develop a floater which can be completed at Newfoundland and with a large local content.

The concrete hull contains a wet oil storage system known from fixed GBS structures, optimised for use in floaters and with an underpressure for additional safety.