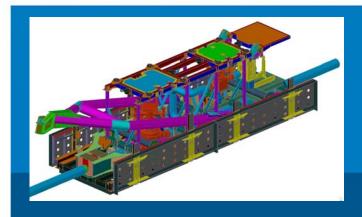


PROJECT:

Ichthys URF In-Line Tee

under-promise over-deliver



CLIENT:

Intecsea/ McDermott

LOCATION:

Ichthys URF Development

DATE:

2012 - 2013

IDENTIFY

CONCEPT

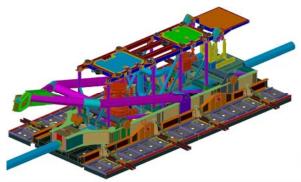
DEFINE

EXECUTE

OPERATE

Linch-pin personnel were seconded in to Intecsea to develop a concept for the 18" Production In Line Tee (ILT) and carry out the detailed structural engineering. The concept work involved developing an integrated sled/ mudmat structure to enable an integrated J-Lay installation using the DCV Aegir, while meeting NTE weight requirements and size restrictions imposed by the moonpool of the installation vessel. Following setdown, the sled, supporting a 12" and an 18" valve, as well as a 12" diverless connector, was released from the mudmat to allow it to slide freely during operation. The mudmat comprised a central mudmat and fold-out wings which were folded up during installation. Prior to set-down the mudmat wings were lowered to their final in-place configuration.

Detailed structural engineering involved analysis and design of the ILT for all pre-service and in-service conditions. Pre-service conditions included load-out, sea transportation, offshore lift, upending in the tower of the DCV Aegir and subsea deployment until set



down onto the seabed. The ILT was designed for operating, extreme, abnormal and seismic conditions. Primary through to tertiary connections were also designed as part of the Execute Phase of the project.

