

VALARIS DPS-1 SEMI-SUBMERSIBLE MODU WELL TEST SUPPORT ENGINEERING AND FABRICATION North West Shelf Australia

ICON was engaged to engineer, design, fabricate and install interfaces to the Valaris DPS-1 semi-submersible MODU in preparation for well testing operations supporting an international Operator's Carnarvon Basin campaigns. ICON was responsible for interfacing the entire well test equipment spread.

ICON provided project management, engineering, fabrication, logistics, offshore installation and client liaison services. ICON was simultaneously delivering other work scopes on the rig for the Operator which allowed synergies for resourcing and scheduling while improving efficiency of the offshore installation scopes.



Sampling lab cabin stacked onto data acquisition cabin



60ft flareboom installation and load testing



Steam manifolds and insulated pipework for steam exchanger



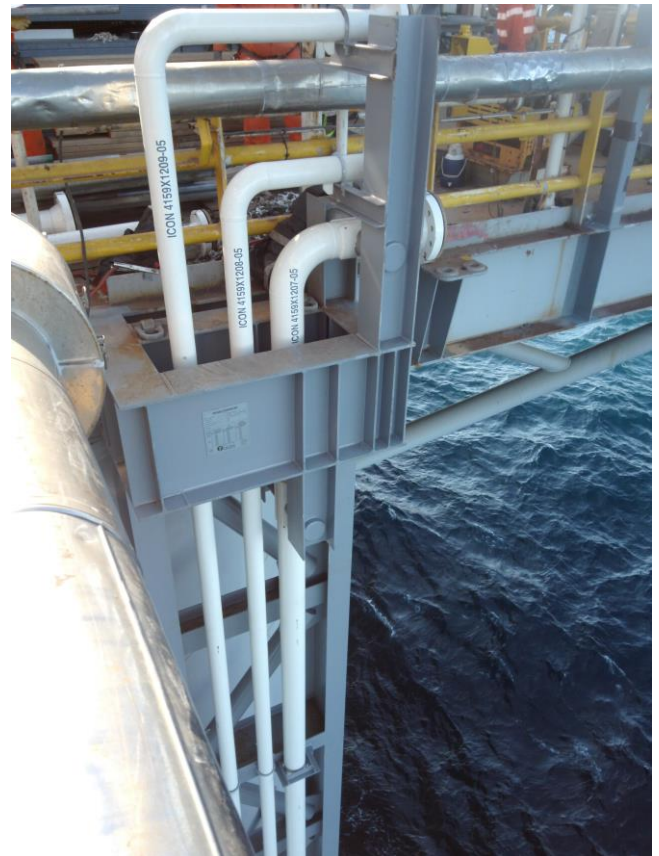
Steam exchanger stacked onto separator

ICON successfully completed the design, fabrication and installation of all the required well test equipment rig interfaces. Deck space constraints were overcome by designing structural frames which allowed stacking of equipment.

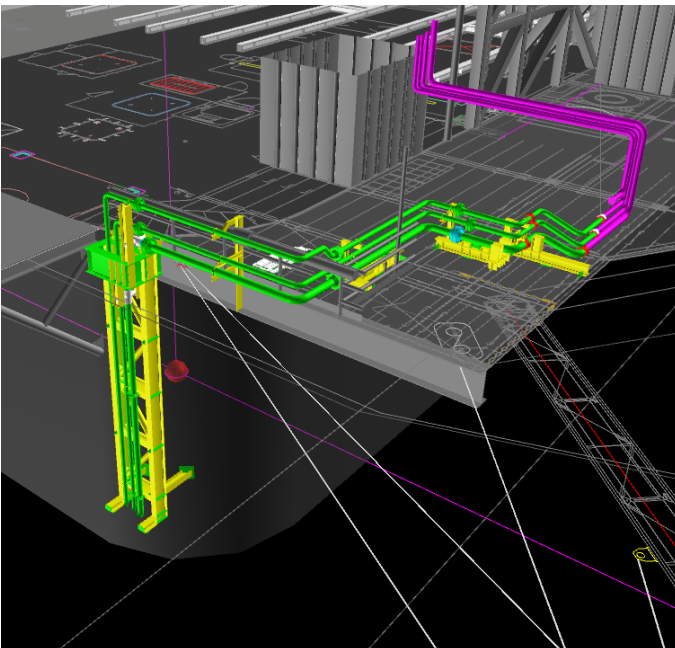
Well test relief lines were subject to significant kick forces and required the design of pipe supports and overboard bracing structures. The design phase was challenging due to limited crane access in the overboard piping installation areas.



Installation of 6" and 8" relief line spools in the well test area



Overboard vent line piping routes and supports installed

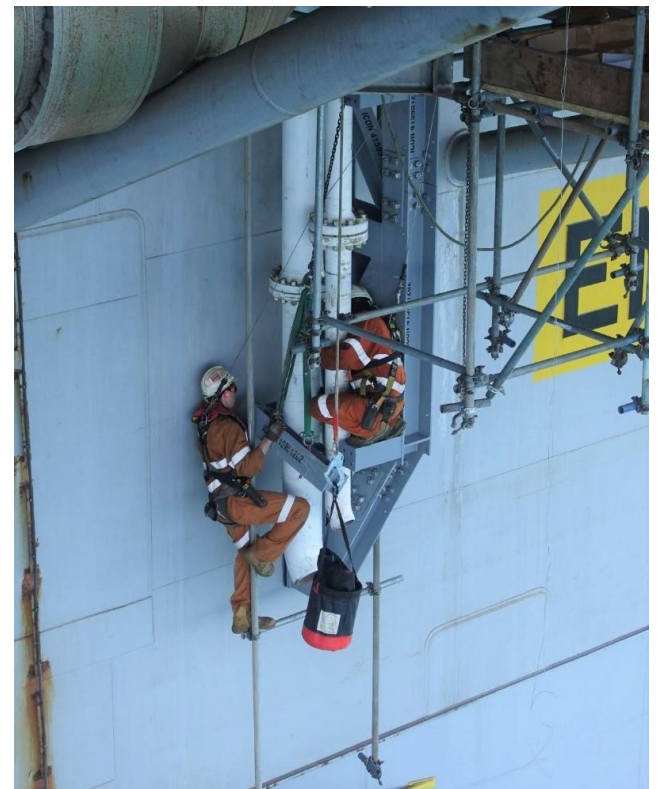


3D modelling of overboard vent line piping routes and supports

Piping routes were determined using 3D modelling to allow for onshore fabrication where possible and reducing the offshore installation duration.

ICON was responsible for the design, fabrication and installation of the following scopes:

- Piping upgrades for the rig's deluge, flareboom and overboard relief lines;
- Well test equipment grillages and seafastening;
- Stacking of well test equipment for deck space efficiencies;
- Walkways throughout the well test area;
- Steam manifold and insulated pipework for the steam exchangers;
- Deluge submersible pump hang off frame; and
- Pipe supports for relief lines throughout well test area.



Overboard relief line piping and bracing structure