Darwin & NW Hutton Development  |  2014
TAQA Bratani Ltd

Project phase:  
Appraise

Dundas scope: 
Development and subsurface engineering expertise.

PROJECT DESCRIPTION

In January 2012 TAQA Bratani entered into a farm-in agreement with Fairfield Cedrus Limited with a view to appraising the Darwin area, in the Northern North Sea. Darwin consists of the Southern end of the abandoned NW Hutton field (NWH), block 211/27a and an extension into block 211/27e. Based on analogue studies of well performance it was thought possible that Darwin could support a new development that might also access additional recovery from the abandoned NWH field.

Two exploration wells and a sidetrack were drilled into different Darwin fault blocks in late 2012/ early 2013. Well 211/27e-13 was dry, and the other two penetrations 211/27e-13z and 211/27a-14 encountered partial oil columns. Based on the results of these wells TAQA initiated development studies on Darwin and NWH.

DUNDAS ROLE

Dundas provided development and subsurface engineering expertise for the evaluation of Darwin and NWH. The study included assessment of likely oil, gas and water production rates, and the requirement for water injection and artificial lift. The results were then integrated with capital and operating cost estimates to screen facilities concepts and design, including fixed platform and subsea tie-back to existing host or FPSO options. Economics were evaluated for all scenarios considered, incorporating sensitivity analysis, to ensure technical work within the project remained focussed on those areas having greatest impact on overall project value.