

Environmental Statement (ES) Summary and Sign-Off

Title: Causeway and Fionn Environmental Statement

Operator: Valiant Causeway Limited

Report No: D/4107/2011 **Submission Date:** June 2011

Block No: 211/22aSE and 211/23d

Development Type: Field Development

Reviewer: Saravanan Marappan

Date: December 2011

A) Project Description:

Valiant is planning to develop the Causeway and Fionn Field as a subsea tieback to Cormorant North Platform, situated over the Cormorant Field. The field development will consist of redevelopment of three suspended wells; two production wells and a water injection well, the installation of subsea infrastructure, a 15.7 km and a 2.9 km production flowline to transport reservoir fluids to Cormorant North Platform, a 15.1 km water injection pipeline and associated control and chemical umbilicals.

Situated within Block 211/22aSE and 211/23d, the Causeway and Fionn Fields lie approximately 150 km east of Shetland Islands and 22 km west of the UK / Norway median line, in a water depth of 150 metres. The Causeway and Fionn Fields has a maximum estimated recovery of 10.42 million barrels of oil.

The wells will be completed using a conventional semi-submersible drilling rig anchored over the well location. Low toxicity oil based mud (LTOBM) will be used for the completion operations and all returned fluids will be skipped and shipped ashore for treatment and disposal. No extended well test will be carried out, but there will be limited flaring during well clean-up over approximately 96 hours.

Pipelay operations will be conducted using a dynamically positioned (DP) reel-lay vessel. The production flowlines, water injection pipeline and the umbilicals will be trenched using a conventional subsea pipeline plough. The trench left by ploughing would be mechanically backfilled. An estimated 21,900 m³ of rock and concrete mattresses will be required to protect the production flowline and water injection pipeline to mitigate against upheaval buckling and to protect pipeline crossings and the subsea infrastructure.

Drilling is scheduled for Q2 2012, subsea installation scheduled for Q2 – Q3 2012 and commissioning scheduled for Q3 – Q4 2012. First production is expected in Q3 - Q4 2012. All activities will be the subject of an approved Oil Pollution Emergency Plan (OPEP).

B) Key Environmental Impacts:

The EIA identified and discussed the following key activities as having the potential to cause an environmental impact:

- Drilling combustion emissions, well clean-up emissions, drill rig anchors, rig and vessel noise, accidental hydrocarbon spills.
- Sub-sea installation combustion emissions, subsea infrastructure and pipelines installation, rock dumping, pipelay vessel noise, hydrotest discharges, accidental spills.
- Production atmospheric emissions, accidental hydrocarbon spills.
- Wider concerns accidental events, transboundary issues, cumulative effects.

C) Key Environmental Sensitivities:

The EIA identified the following environmental sensitivities:

- Fish: The area is recognised as a spawning area for Haddock, Saithe, Norway pout and Cod and nursery area for Haddock, Norway pout, Mackerel and Blue Whiting. The spawning and nursery areas are extensive and the area of impact would be localised and temporary. Therefore the drilling of wells and pipelay is unlikely to impact these species.
- Seabirds: Seabird vulnerability is high in March, July, October and November and moderate to low throughout the remainder of the year. It has been assessed that there are sufficient mitigation measures in place to prevent accidental spills that could have a significant impact on seabirds and this will also be covered by the OPEP.
- Protected habitats: There are no designated protected sites in the vicinity of the proposed development, including Annex I habitats as defined by the Habitats Directive.
- Protected species: Pilot whale, Minke whale, Killer whale, White-sided dolphin, White-beaked dolphin and Harbour porpoise have been recorded in this general area. Low to high numbers of Harbour porpoise has been recorded frequently between May and August. Grey and Common Seals inhabit the coastal waters and although common seals have occasionally been observed to travel long distances when foraging, both species are unlikely to be present in the area of the proposed development. Any disturbance of marine mammals is expected to be limited to the drilling period, and the short duration and localised disturbance is considered unlikely to have any significant impact.
- Other users of the sea: The proposed development is situated within ICES rectangle 51F1 and between 2002 and 2009 there was an average of 93 days fished per annum. Shipping density in the vicinity of the proposed development is moderate to low.

D) Consultation:

Comments were received from the Joint Nature Conservation Committee (JNCC), Marine Scotland (MS), Maritime and Coastguard Agency (MCA), Ministry of Defence (MoD) and Northern Lighthouse Board (NLB). The ES was also subject to public notice.

JNCC: JNCC requested additional information on the seabed features and habitat investigation. Following the provision of additional information, JNCC confirmed that they were content for the ES to be accepted. JNCC confirmed that the proposals were unlikely to have a significant environmental impact on the nature conservation value of the marine environment.

MS: MS confirmed that they were content for the ES to be accepted.

MCA: MCA confirmed that they have no objections.

MoD: MoD confirmed that they have no objections.

NLB: NLB advised that the permanent infrastructure on the seabed must be communicated to UK Hydrographic Office to ensure updating of all relevant admiralty charts.

Public Notice: No comments were received in response to the public notice.

E) Further Information:

Further information was requested from Valiant which addressed the issues raised by JNCC and the internal DECC review, which included clarification in relation to the seabed features and habitat investigation, atmospheric emissions, accidental events and spill modelling. Additional information was provided by Valiant on 21 September 2011, 16 November 2011 and 9 December 2011, which adequately addressed the issues raised.

F) Conclusion:

Following consultation and the provision of further information, DECC OED is satisfied that this project will not have a significant adverse impact on the receiving environment or the living resources it supports, or on any protected sites or species or other users of the sea.

G) Recommendation:

On the basis of the information presented within the ES and advice received from consultees, DECC OED is content that there are no environmental or navigational objections to approval of the proposals, and has advised DECC LED that there are no objections to the grant of the relevant consents.

Approved: Sarah Pritchard - Head of Environmental Operations Unit

Sarah Pritchard	
Date:22/12/2011	