To: Sarah Pritchard  
From: Sarah Dacre  
Date: 19 August 2009

**ES Title:** Acorn Well 29/08a-F Extended Well Test  
**Operator:** Venture North Sea Oil Limited  
**Consultants:** Genesis Oil and Gas Consultants Ltd.  
**Field Group (DECC):** London  
**ES Report No:** W/4054/2009  
**ES Date:** June 2009  
**Block Nos:** 29/08  
**Development Type:** Extended Well Test (EWT)

### Project Description

The project comprises:

- A 2-day clean-up operation;
- 17 day well test, where 51,000 bbls (477m³ of oil and 19.972MMscf of gas per day) of produced hydrocarbons will be flared.

### Environmental Sensitivities

The EIA identified the following environmental sensitivities:

- 209km from the east coast of Scotland;
- Low shipping activity;
- Low fishing activity;
- Fish spawning area for mackerel, lemon sole and Norway pout. There are currently no restrictions on drilling or seismic activity in this block during the drilling period proposed.
- Seabird vulnerability is high in January, July and November. The remainder of the year has moderate to low vulnerability;
- Annex I Habitats: There were no Annex I habitats identified within the vicinity of the proposed project.
- Annex II Species: harbour porpoise occurs in moderate to low numbers, mainly in the summer months;

### Key Potential Environmental Impacts

The following potential impacts and mitigation were addressed in the EIA:

- **Atmospheric emissions** – Modeling results showed that CO₂ emissions from the EWT represent 5.2% of CO₂ emissions from mobile installations reported in 2005, however due to the short duration of the proposed operation and the fact that flaring will not be continuous it is unlikely that such emissions would have a significant local effect. Further modeling assessment was conducted for NO₂, SO₂ and nmVOC emissions and all were
found to have a negligible impact and not considered to have a significant impact on the surrounding environment.

- **Cumulative Impacts** – The nearest installation to the Acorn location is Curlew FPSO, located 15km south-west of the Acorn well. Emissions from the Acorn EWT are not predicted to lead to any breach of air quality standards at Curlew. North Sea wind conditions will ensure rapid dispersion of atmospheric emissions to background levels and therefore no cumulative impacts are expected.

- **Transboundary Impacts and Global Impacts** - the Acorn location is 57km from the UK/Norwegian transboundary line and any emissions are unlikely to be significant. Global warming Potential (GWP) is a measure of how much a given gas emission is estimated to contribute towards global warming compared to an identical mass of CO₂. GWP from the Acorn EWT is 27,496 tCO₂eq, which represents 0.14% of the total offshore GWP from 2005 figures. From a global perspective atmospheric impact can be considered insignificant.

- **Accidental events** – A number of control measures will be in place to minimise the risk of accidental events such as an Oil Pollution Emergency Plan (OPEP) and an Emergency Response Plan (ERP). Procedures have been put in place to minimise the risk of spills during the EWT phase of operations, including the minimising of bunkering operations, and the visual inspection of hoses and connections. In the event of a chemical spill, chemicals are likely to be quickly dispersed and diluted causing little impact to the marine environment.

In addition, Venture have other measures in place to minimise and control any unplanned release of hydrocarbons through flaring. These include:

- Minimising the volume of oil and gas flared, consistent with either the clean-up or the EWT data gathering requirements.
- Using green burners to minimise production of black smoke and oil drop out.
- Allocating responsibility to a person for watching the flare 24 hours a day. If an oil sheen is observed, flaring will stop and only be resumed when the cause of the sheen has been identified and rectified.
- During the EWT the flare behaviour and associated noise will also be observed and the observations used as indicators of burner performance, particularly during night time flaring.

**Public Consultation:** No comments were received as a result of the public consultation.

**Consultee(s):**

The statutory consultees for this project were JNCC and Marine Scotland. The following comments were made:

**JNCC:** Recommendation for approval was given.

**Marine Scotland:** Though there is little likely impact fisheries resulting from the proposed EWT, MS were not satisfied with the effort demonstrated by Venture to discuss other disposal options which have been proven by other operators on the UKCS, especially with respect to Greenhouse emissions. Recommendation for approval was given.

**Further Information:** A variety of comments relating to the overall quality of the ES were
highlighted, in addition to a request for Venture to clarify flaring quantities as there seemed to be some discrepancy between figures, both within the ES and between the ES and PON15B. Although, further consideration of options was not formerly requested, it was made clear that for future submissions, more detail and analysis would be expected.

Venture North Sea Gas Limited provided the additional information requested and where appropriate acknowledged comments and committed to incorporating them in future submissions. All issues were considered satisfactorily amended and clarified.

**Conclusion(s):**

Following consultation and the provision of the additional information on the 7th August, DECC and its consultees are satisfied that this project is not likely to have a significant impact on the receiving environment, including any sites or species protected under the Habitats Regulations.

**Recommendation(s):**

On the basis of the information presented within the ES and advice from consultees it is recommended that the ES should be approved.

...............Sarah Pritchard...............  
Sarah Pritchard  Date 19 August 2009