



## Environmental Statement (ES) Summary and Sign-Off

<b>Title:</b>	Tonto Field Development Environmental Statement
<b>Operator:</b>	Apache North Sea Limited (Apache)
<b>Report No:</b>	D/4154/2012
<b>Matrix folder:</b>	12.04.05.02/86c
<b>Submission Date:</b>	January 2013
<b>Block No:</b>	21/10
<b>Development Type:</b>	Field Development
<b>Reviewer:</b>	Valerie Appleyard
<b>Date:</b>	March 2013

### Project Description

Apache propose to develop the Tonto Field in Block 21/10 in the central North Sea, located approximately 1.3 kilometres (km) to the east of Apache operated Forties Bravo platform. Forties Bravo is located approximately 155 km east of Peterhead and 55 km west of the UK / Norway median line, in a water depth of approximately 123 metres.

The development will consist of the drilling of up to five production wells from Forties Bravo platform as extended reach wells. Production and export of reservoir fluids will be handled using existing facilities on Forties Bravo and Forties Charlie platforms.

Drilling is scheduled during the first half of 2013. The field life is expected to span from 2013 to 2019 with an estimated recoverable reserves of 2.5 million barrels of oil.

### Environmental Sensitivities

The Environmental Impact Assessment (EIA) identified the following environmental sensitivities:

- Lemon sole, Norway pout and *Nephrops* spawn in the area of the proposed development and it is also a nursery area for Haddock, Blue Whiting, Norway pout and *Nephrops*;
- Seabird vulnerability is very high in September to November and high in July and August, moderate to low in months throughout the remainder of the year;
- Annex I habitats: No potential Annex I habitats have been designated in the vicinity of the proposed development. Recent seabed mapping in the Forties area has identified a number of pockmarks in the Forties area, particularly in deeper waters. The nearest Special Area of Conservation (cSAC) is the Scanner Pockmark, located approximately 58 km to the north of the proposed development;
- Annex II species: Harbour Porpoise, White-beaked Dolphin, Atlantic White-sided Dolphin and Minke Whale have been recorded in the general area with peak numbers being recorded in the summer months. Grey and Common Seals are unlikely to be present in large numbers.
- Other users of the sea: The Forties field lies to the south of a large area of moderate to high level fishing effort over the Fladen Ground. Shipping density in the Forties area is moderate.

## Potential Environmental Impacts

The ES identified the following potential impacts and related mitigation measures:

**Physical presence:** The wells will be drilled from the Forties Bravo platform which has integrated drilling facilities and the development drilling programme will not require use of a Mobile Drilling Unit. There will be no significant impact on other users of the sea.

**Seabed disturbance:** The wells will be drilled from the Forties Bravo platform using Low Toxicity Oil Based Mud (LTOBM) and Water Based Mud (WBM). Each well will generate approximately 1200 tonnes of LTOBM cuttings which will be re-injected and approximately 12 tonnes of WBM cuttings which will be discharged to sea which are expected to rapidly disperse. The proposed development requires no additional subsea infrastructure.

**Noise:** The incremental increase in noise is expected to be limited to the drilling operations, and the short duration and localised disturbance is considered unlikely to have any significant impact.

**Atmospheric emissions:** The main source of atmospheric emissions will be fuel use during the drilling and production operations. The incremental increase in emissions of CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>x</sub>, CH<sub>4</sub> and VOCs is estimated to be less than 1% of total emissions from the Forties installations.

**Marine discharges:** The maximum rate of produced water from the Tonto fluids is estimated to peak at approximately 1000 cubic metres/day in 2014. The majority of produced water will be discharged from the partial processing unit on Forties Bravo platform with the remainder being exported to Forties Charlie platform and re-injected. The chemicals used in the course of the drilling and production operations will be risk assessed in relevant chemical permit applications.

**Accidental events:** Control measures will be in place to minimise the risk of an accidental events. The Forties Field Oil Pollution Emergency Plan (OPEP) covers the proposed Tonto development and modelling of worst-case blow-out and diesel spillage has been undertaken.

**Cumulative impacts:** The proposed development is within a well developed oil and gas area of the central North Sea, with moderate level of shipping and commercial fishing operations, and it is not anticipated that there will be any significant navigational or environmental effects.

**Transboundary Impacts:** The proposed drilling and production activities are not anticipated to result in any significant transboundary effects, with discharges to sea expected to disperse within a short distance from the development. In the event of an oil spill entering the waters of an adjacent State, it may be necessary to implement international contingency arrangements, e.g. the NORBRIT Agreement (the Norway-UK Joint Contingency Plan).

## Consultation:

The Joint Nature Conservation Committee (JNCC), Marine Scotland (MS), the Maritime and Coastguard Agency (MCA) and the Ministry of Defence (MoD) were consulted on the proposals. The ES was also subject to public notice.

**JNCC:** JNCC confirmed that the environmental impacts of the proposed development on the marine environment had been sufficiently assessed.

**MS:** MS confirmed that they were content for the ES to be accepted and have noted to make an informed chemical risk assessment when considering the relevant chemical permit applications.

**MCA:** MCA confirmed that there were no objections.

**MoD:** MoD confirmed that there were no objections

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

**Conclusion:**

Following review of the ES, the comments received from consultation, DECC OGED 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.

**Recommendation:**

On the basis of the information presented within the ES and advice received from consultees, DECC OGED 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

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**Date:** .....17/04/2013.....