

**Sycamore Field Development
ES Web Comments**

ES Title: **Sycamore Field Development**
Operator: **Venture Production Company (North Sea) Limited**
ES Report No: **D/1449/2001**
ES Date: **December 2001**
Block Nos: **16/12a**
Development Type: **Field Development**

Synopsis: The Sycamore Field which is owned by Venture Production Company (North Sea) Limited, AGIP Birch Ltd, AGIP Exploration & Production Ltd., and Marubeni Oil & Gas (UK) Ltd., is situated in Block 16/12a, approximately 194 km East of the UK mainland, and 15 km from the UK/Norway median line (216 km west of the Norwegian Coast). The field lies in approximately 125 metres of water and is an oil and gas field.

The project consists of drilling up to 7 wells, 4 producers and 3 water injectors, which are to be tied back via a new Sycamore manifold and an existing Birch Manifold to an existing platform-Brae Alpha (block 16/7), operated by Marathon which is approximately 15km distant from the field. The wells will be drilled in 4 phases, each phase being contingent on the performance of the previous phases. Phase 1 consisting of drilling the new well SP1, re-entering wells SP2 & SP3 installing & tie-in to the new Sycamore Manifold & the existing Birch manifold. Phase 2, drilling 2 new deviated water injection wells SW1 & SW2 and tie back to the Sycamore manifold. Phase 3, drilling and completion of the new deviated production well SP4 and tie-in to the Sycamore Manifold. Phase 4, drilling and completing the new water injection well SW3 and tie back to the Sycamore manifold.

A combination of Water Based Mud (WBM) and Low Toxicity Oil Based Mud (LTOBM) is to be used with LTOBM cuttings to be shipped to shore.

The field has an estimated 15 year life and a projected maximum production rate of 22,000bopd, with a peak annual gas production of 30.5 mmscfd. First oil is planned for November 2002. The production fluids will be collected at the new Sycamore manifold and transported via the existing Birch manifold, where the fluids will be co-mingled and transported to Brae Alpha for processing. The crude oil will be exported from Brae Alpha to shore via the existing Forties Pipeline system. Associated gas will be disposed of via existing injection or export compression facilities.

Well clean ups are planned for the 4 production wells only with an estimated 168 tonnes of oil to be flared for each well over a six hour period. No extended well test is planned.

Produced water will be returned to Brae Alpha where it will be discharged as a combined stream with other Trees fields, South & Central Brae. Marathon has a target discharge of 25ppm oil in water for the discharges from Brae Alpha.

There will be a number of additions to the existing subsea layout, including 4.3km pipelines (10" production 12" water injection pipeline & 4" gas lift and control umbilical) connecting the new Sycamore manifold to the Birch manifold. A 0.8km pipeline (6" production line, 4" gas lift line and control umbilical) connecting the remote well SP3 to the new manifold will also be required. Pipelines are to be bundled on the seabed.

There will also be minor topsides modifications required to the Brae Alpha. The additional throughput will require an additional 600kW to power the export pumps. There will also be amendments to the water injection, produced water and chemical injection systems.

Additional information was requested on a number of issues, in particular with regard to cumulative effects, option selection, assessment of contamination of suspension brine, and monitoring. Following provision of additional information contained in two letters dated 11th & 29th April 2002, and additional clarification from FRS regarding the issues arising out of the public consultation, we are satisfied that the ES addresses the impacts from the proposed development and overall no significant environmental impacts have been identified.

Consultees: The statutory consultees for the ES were the JNCC and FRS

JNCC: JNCC is content for the field development consent to be issued but requested details on well clean up, manifold installation, produced water, pipelaying and bunkering.

FRS: FRS requested clarification of a few minor points relating to assessing contamination of suspension brine, anchor mounds, manifolds, pipeline installation and chemical usage. These issues were addressed by responses by the company and both JNCC and FRS have confirmed they are content for the project to proceed.

Public Consultation – Comments were received as a result of public consultation, mainly concerning the effects of hydrocarbons on fish larvae and enzyme activity in fish larvae, the lack of detail provided on chemical usage, and cumulative effects. The additional information supplied by the company, together with a response from FRS has addressed the issues raised.

Recommendation: **The field development consent should be granted**