

# TECHNICAL UPDATE

# Barryroe Oil Field Reservoir Analysis Update

# STATIC & DYNAMIC BASAL WEALDEN RESERVOIR ANALYSIS RESULTS

- MODELLED RECOVERY FACTORS OF 17-43% UTILISING HORIZONTAL PRODUCTION & WATER INJECTION WELLS
- MODELLED RECOVERY FACTOR OF 31% TO BE USED FOR DEVELOPMENT PLANNING

# • DEVELOPMENT CONCEPT ENGINEERING CONTRACT AWARDED

Providence Resources P.I.c., ("Providence") the Irish oil and gas exploration and development company, whose shares are quoted in London (AIM) and Dublin (ESM), is pleased to provide a further update on its Barryroe oil field in the North Celtic Sea Basin, offshore Ireland. Providence (80%) operates Barryroe on behalf of its partner Lansdowne Oil and Gas plc (20%). The area is located in Standard Exploration Licence (SEL) 1/11 and Licensing Option (LO) 12/4, situated in c. 100 m water depth and is c. 50 km off the south coast of Ireland.

Providence has recently undertaken static and dynamic modelling of the main Basal Wealden oil bearing reservoir interval. This work which incorporated the data from all five Basal Wealden reservoir penetrations, together with maps derived from the recent 3D seismic survey. This study has established oil recovery factors which range from 17% to 43%. Based on a development scenario involving 41 horizontal production and 22 horizontal water-injection wells over a 25 year field life, a recovery factor of 31% is modeled. These horizontal producer and injector wells are designed to be 600m in length, with the producers incorporating gas lift.

Providence is also pleased to announce that the Barryroe Concept Development Engineering Study contract has been awarded to Procyon Oil & Gas. This study will evaluate a number of preferred development options which were high-graded during the recently completed development screening study.

Speaking today, John O'Sullivan Technical Director of Providence said;

"These reservoir and dynamic modelling studies have identified significant productive potential in the Basal Wealden reservoir, which is consistent with the test and other data that we have previously announced. These results will now be factored into our ongoing field pre-development work where we have kicked off a key engineering study to identify and select the optimum development concept. As part of this study, we will obviously consult and solicit feedback from both regulatory and local stakeholders on an ongoing basis."

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### **NOTES TO EDITORS**

#### **ABOUT PROVIDENCE**

Providence Resources Plc is an Irish based oil and gas exploration company with a portfolio of appraisal and exploration assets in Ireland (offshore) and the United Kingdom (offshore). In 2011, Providence, along with its partners, commenced a circa \$500 million multi-year drilling programme on a number of exploration and development wells in 6 different basins offshore Ireland. This programme represents the largest drilling campaign ever carried out offshore Ireland. <a href="https://www.providenceresources.com">www.providenceresources.com</a>.

#### **ABOUT BARRYROE**

The Barryroe licence (SEL 1/11) lies in the North Celtic Sea and has had six wells successfully drilled on the structure. Hydrocarbons have been logged in all six wells with flow test results from four wells. Four wells were drilled in the 1970's by Esso with a further appraisal well drilled in 1990. The last well, 48/24-10z, was drilled by Providence in 2011/2012. The field is fully covered by both 2D and 3D seismic. The reservoir sands are of Cretaceous Middle and Lower Wealden age located between c. 4,500' TVDSS and 7,550' TVDSS. The oil is light (43° API) with a wax content of c. 17-20%.

As previously reported, the latest oil in place estimate for the two main reservoir intervals (Middle Wealden and Basal Wealden) are 1,043 MMBO (P50) and 1,612 MMBO (P10). The oil in place estimates for the Lower Wealden and Purbeckian are 778 MMBO (P50) and 1,165 MMBO (P10), but no recovery factor has been assessed for these reservoir intervals at this time.

#### **ANNOUNCEMENT**

This announcement has been reviewed by John O'Sullivan, Technical Director, Providence Resources P.I.c. John holds a B.Sc. in Geology from University College Cork, Ireland, an M.Sc. in Applied Geophysics from the National University of Ireland, Galway and a M.Sc. in Technology Management from The Smurfit School of Business at University College Dublin. John is presently working part-time on a PhD dissertation at Trinity College, Dublin. John has worked in the offshore business for 20 years and is a fellow of the Geological Society of London and member of The Petroleum Exploration Society of Great Britain. Definitions in this press release are consistent with SPE guidelines.

SPE/WPC/AAPG/SPEE Petroleum Resource Management System 2007 has been used in preparing this announcement