

May 24, 2012

## **Barryroe Well Test Analysis**

- **WELL TEST ANALYSIS INDICATES HIGH PERMEABILITY BASAL OIL BEARING RESERVOIR INTERVAL**
- **HORIZONTAL DEVELOPMENT WELLS PREDICTED TO DELIVER SIGNIFICANT PRODUCTION RATES**

Lansdowne Oil & Gas, ("Lansdowne"), the AIM listed oil and gas exploration company, welcomes the announcement today of the technical update by Providence Resources plc ("Providence") on the Barryroe Seismic Inversion Study.

The Barryroe oil discovery is located in c. 100 metre water depth, c. 50 kilometres offshore Ireland in Standard Exploration Licence (SEL) 1/11 in the North Celtic Sea Basin. Providence (80%) operates SEL 1/11 on behalf of itself and Lansdowne (20%).

The announcement by Providence stated the following:

A comprehensive programme of post-drill studies is continuing in order to better define the Barryroe oil in place resource and potential recoverable reserves. In early May (see RNS of May 10<sup>th</sup>), the first of these studies detailing results of seismic inversion work confirmed that the basal hydrocarbon bearing sandstone package can be directly mapped from 3D seismic data. These data also indicated that this basal reservoir sequence is widely developed in the Barryroe area.

Providence has completed further analysis of the 48/24-10z well test data which were acquired by Schlumberger during well testing operations. The data were analyzed using a leading wellbore modeling software system to determine the potential Initial Production (IP) rates achievable from a single horizontal development well. This analysis indicates that the tested basal oil bearing sandstone package is of high quality with an average test derived permeability of c. 400 millidarcies, confirming the high productivity potential as demonstrated during the well testing operations. The analysis forecasts that a 1,000' horizontal well could deliver an IP of c. 12,500 BOPD & c. 11 MMSCFD (c. 14,300 BOEPD) through a standard 4.5" outer diameter (OD) production tubing under natural lift. Further well deliverability analysis and optimization studies are ongoing to incorporate artificial lift which is expected to form part of the field development plan. Updated oil in place estimates are expected to be finalised during Q3 2012 with the estimated recoverable reserves and associated development concept being available in Q4 2012.

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

*"We had anticipated that we were dealing with a high productivity oil system both in terms of oil mobility and reservoir development. These figures now confirm the magnitude of that productivity potential and clearly demonstrate that the Barryroe basal sands could potentially deliver oil at significantly higher production rates than was previously modeled. This obviously has an important effect on the forward development planning and potential production profiles and should serve to increase the project valuation. In addition, given that the seismic modeling is allowing us to directly map the reservoir interval from the 3D seismic data, we are now in a better position to plan for horizontal wells and benefit from their associated material incremental well production rates."*

**Commenting on this update, Steve Boldy, CEO of Lansdowne stated:**

**"The results of the Barryroe well test analysis are very encouraging, demonstrating that the Lower Cretaceous Basal Wealden sands have the potential to deliver at high flow rates. This is important not only for Barryroe, but for pursuing this play elsewhere in the North Celtic Sea Basin and in particular in Lansdowne's Amergin Prospect where the basal Wealden sands form one of the key target reservoirs."**

### **Contacts**

Lansdowne Oil & Gas plc

Steve Boldy

Chief Executive Officer

+353 1 637 3934

Chris Moar

Finance Director

+44 1224 748480

finnCap

Sarah Wharry

Corporate Finance

+ 44 20 7220 0500

### **About Lansdowne**

Lansdowne is an exploration and appraisal oil and gas company listed in London on the AIM Market (Symbol : LOGP). Lansdowne holds a balanced portfolio of oil discoveries, low and moderate risk gas prospects near existing infrastructure and moderate risk oil prospects. The Company is focused on the underexplored North Celtic Sea Basin which has proven petroleum systems in place for both oil and gas. For more information, visit the Company's website: [www.lansdowneoilandgas.com](http://www.lansdowneoilandgas.com)

### **About Barryroe**

The Barryroe licence lies directly below the Seven Heads Gas Field and has previously been successfully tested at flow rates of 1,300 and 1,500 BOPD from the Middle Wealden and 1,600 BOPD from the basal Wealden, from three exploration and appraisal wells. 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 (30 to 42° API) with a wax content ranging from 12 to 22 per cent. Lansdowne holds an 20% interest in the licence, which is operated by its partner Providence Resources Plc (80%).

On March 15<sup>th</sup> Providence announced the results of DST 1A which confirmed the successful testing of the lower basal 24' net oil bearing interval, which flowed c. 3,514 BOPD & 2.93 MMSCFGD (c. 4,000 BOEPD), On March 23<sup>rd</sup>, an additional 17' thick net gas bearing

section was perforated to test the potential of the upper part of the basal Wealden sandstone section. The surface test spread equipment was optimized for the lower oil zone test and was therefore equipment constrained on this gas zone test, which achieved highly productive flow rates of c. 7 MMSCFGD & 1,350 BOPD (c. 2,516 BOEPD) through a restricted 36/64" choke, with a flowing well head pressure of c. 1,700 psig. The productivity of the gas bearing interval far exceeded expectations and thereby constrained the ability to fully open the well up to its maximum potential. Preliminary modeling of the pressure data indicates that a co-mingled flow rate of c. 17 MMSCFGD & 3,350 BOPD (c. 6,183 BOEPD) at a flowing well head pressure of c. 500 psig is achievable.

In 2010 a third party audit carried out by RPS Energy for Lansdowne Oil & Gas plc indicated combined Middle and Lower Wealden P50 and P10 STOIP estimates for Barryroe of 373 MMBO and 893 MMBO, respectively. The corresponding 2C and 3C Barryroe technically recoverable contingent resources are 59 MMBO and 144 MMBO, respectively. These figures are subject to revision upwards due to the results of the testing of the 48/24-10z well and the ongoing post well studies.

In 2011, Providence entered into a MOA with Shell Trading and Marketing to agree an oil off-take agreement for future Barryroe oil production.

## **Glossary**

TVDSS – True Vertical Depth Subsea

° API – Measurement Of Oil Gravity

BOPD – Barrels of Oil per Day

BOEPD – Barrels of Oil Equivalent per Day

MMSCFGD – Millions of Standard Cubic Feet of Gas per Day

SCF/STB – Standard Cubic Feet/Stock Tank Barrel

PSIG – Pounds per Square Inch Gauge

## **Qualified Person Review**

This release has been reviewed by Stephen Boldy, Chief Executive of Lansdowne, who is a petroleum geologist with 31 years' experience in petroleum exploration and management. Dr. Boldy has consented to the inclusion of the technical information in this release in the form and context in which it appears.