



## **PRESS RELEASE**

**18 February 2008**

### **3D Seismic Interpretation Update**

- Prospect Mapping Completed
- 5 hydrocarbon plays identified
- Prospects could contain over 1.9 billion barrels recoverable
- Technical work moving to the next stage
- Substantial increase in drillable targets

Rockhopper is pleased to announce the results of the initial phase of mapping of prospects in its North Falkland Basin licences, PL032 and PL033, where 850km<sup>2</sup> of 3D seismic data were collected in 2007. It is estimated by the Directors of Rockhopper that the prospects identified could contain 1.9 billion barrels unrisks recoverable and have P50 unrisks recoverable reserves of circa 1.2 billion barrels. This list of prospects does not include a number of additional leads which are still being investigated. In addition, prospects have already been identified on licences PL023 and PL024 which the Directors believe have P50 unrisks recoverable reserves of 2.5 billion barrels.

The new mapping has identified five hydrocarbon plays in the acreage and confirmed the presence of multiple drilling targets. In addition, the 3D seismic has revealed that one of the exploration wells drilled by Shell in 1998 which (amongst other oil shows) encountered a thin sand with good hydrocarbon shows, is actually located at the very edge of a fan prospect which appears to thicken towards its centre. The Directors now believe that this thicker part of the fan prospect could therefore contain commercially viable accumulations of hydrocarbons.

The acreage, now held 100% by Rockhopper was previously held by Shell and two wells were drilled in 1998. Well 14/5-1 found oil and gas shows, well 14/10-1 recovered live oil to the surface. The Rockhopper 2007 3D seismic survey overshot the well locations and also the unexplored eastern basin margin which is currently an untested oil play.

The data confirm the prospectivity of the acreage and have further reduced the exploration risk as more play types have been identified.

Rockhopper will now commence advanced work on the data which will include AVO analysis, imaging studies, geochemical modelling, further detailed log analysis, depth conversion and reservoir modelling.

A table of prospect sizes and additional technical commentary on the play types is attached as an appendix.

Rockhopper's Executive Chairman, Dr. Pierre Jungels, commented:

"The quality of the 3D seismic data and the further insight into the basin it has allowed us is extremely encouraging. In my experience, we now have a very high quality prospect inventory from which to select a number of drilling locations. Work will now focus on refining the prospect inventory, including those previously identified in licences PL023 and PL024, in preparation for drilling or farming out.

In fairly shallow waters such as we have on this acreage, modern drilling techniques, subsea wells and FPSO technology allow stand alone development of structures smaller than the majority of those identified.

We now have sufficient drilling targets to justify a drilling campaign, whether that means farming out or obtaining a rig as operator. Now that we have a larger number of potential drillable targets we can also begin to accelerate our search for a rig."

NB: This statement has been approved by the Company's geological staff who include David Bodecott (Exploration Director), who is a Member of Petroleum Exploration Society of Great Britain (PESGB) and the American Association of Petroleum Geologists (AAPG) with over 30 years of experience in petroleum exploration and management, for the purpose of the Guidance Note for Mining, Oil and Gas Companies issued by the London Stock Exchange in respect of AIM companies, which outline standards of disclosure for mineral projects.

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## Technical Appendix

Recoverable oil  
Millions of barrels  
Unrisked

<i>Play Type</i>	<i>Prospect Name</i>	<i>P50</i>	<i>P10</i>
<b>Pinchout</b>			
	Sedge	68	93
	Tyssen	24	24
	Jason	132	202
<b>Fans</b>			
	Sea Lion	154	350
	Chatham	106	188
<b>Downthrown Closures</b>			
	Pembroke	9	18
	Howard	8	20
	Meredith	14	20
	Walker*	21	*
	Louis*	90	217
	Bull	76	76
	Fox	76	156
	Stephens	78	78
	Darwin	40	61
<b>Intra Basinal Structures</b>			
	Johnson	125	210
<b>Central Basin Inversion</b>			
	Berkeley	130	200
	George	21	63
<b>TOTAL</b>		<b>1170</b>	<b>1977</b>

\*Walker and Louis are a single prospect at P10, but separate smaller prospects at P50

The five hydrocarbon plays are as follows:

*1. Basin Margin Pinchout.*

The pinchout of the deltaic unit (sand unit penetrated by the Shell wells) against the basement high that forms the eastern basin margin. Both Shell wells proved this unit at locations within the basin centre and indicated good reservoir characteristics with porosities of up to 30%.

The pinch out play may be more advantageously placed for hydrocarbon charge from the large basin margin fault system than the original target of the Shell wells which were in the centre of the basin.

*2. Sand-rich Fan systems.*

A number of fans have been identified at several stratigraphic levels.

Further interpretation work is required to establish the nature and significance of some of a large number of seismic high-amplitude events associated with these reservoir systems.

The Sea Lion fan, issued from two input points along the eastern basin margin and was not tested by either of the Shell wells. This coalescing fan system is defined by a zone of amplitude brightening in a structural and depositional low.

The Chatham fan, which is a north–south prograding system characterised by elongate channel-attached lobes, appears to have been tested at its edge by the second Shell well (14/10-1). A 1m thick sand was encountered in this well having very good C1 to C5 hydrocarbon shows. The fan appears to thicken away from the well into an area of very bright seismic amplitudes. This suggests that commercially viable accumulations of hydrocarbons could be present in the brighter areas of the fan which have not yet been tested. These areas will be further investigated for prospectivity during further technical work.

*3. Basin margin Downthrown Closures.*

Several seismic intervals form substantial closed structures along the hanging wall (downthrown flank) of the huge eastern margin fault system. Amplitude anomalies are associated with some of the mapped levels and additional technical work will resolve the significance of these.

The downthrown basin margin play is completely untested in the North Falkland Basin and it has always been recognised as a play that can be readily charged by hydrocarbons generated from the mature base of the organic-rich Post-rift source sequence. The Shell wells proved that the Post-rift source is mature in this area of the North Falkland Basin.

*4. Intra-basinal Structural highs.*

Structural closures independent of the basin margin fault. One very large such prospect has been identified. Additional work is required on this target as it extends beyond the area of 3D coverage and the reserve estimate here includes only the element of the prospect covered by the 3D. This is separate to the basin centre inversion structure tested by the Shell wells.

### *5. Central basin inversion high related prospects*

Shell drilled a large basin centre inversion structure in 1998. While both wells were commercial failures at that time (with oil at USD12 per barrel) they did prove the existence of hydrocarbons in the area (both oil and gas). The Shell structure is so large that a number of untested prospects may exist in flanking areas, some of which are also related to fans and amplitudes not tested by the previous wells. Targets have been identified to the North, West and South of the Shell wells related to the same structure which was not exhaustively tested by the two wells in 1998.

#### **Notes to editors**

[www.rockhopperexploration.co.uk](http://www.rockhopperexploration.co.uk)

The Rockhopper Group started trading in February 2004 to invest in and carry out an offshore oil exploration programme to the north of the Falkland Islands. The Group, floated on AIM in August 2005, is currently the largest licence holder in the North Falkland Basin and has a 100 per cent. interest in four offshore production licences which cover approximately 3,800 sq. km. These licences have been granted by the Falkland Islands government.