



**OIL BASINS** LIMITED

ABN 56 006 024 764

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Company Announcements Office  
Australian Stock Exchange Limited  
10<sup>th</sup> Floor, 20 Bond Street  
Sydney NSW 2000

Dear Sirs

### **COAL MEASURES ASSESSMENT POTENTIAL OF 5/07-8 EP AND THE BACKREEF AREA**

The following announcement is made by Oil Basins Limited (“**OBL**” or the “**Company**”: ASX codes “**OBL**” and “**OBLOA**”) to keep the market fully informed.

In late 2009, OBL commissioned independent expert geologist Ms Dierdre Westblade of Westby Consulting to assess the coal measures within Permit 5/07-8 EP as part of a wider study of the Coal Seam Gas (“**CSG**”) potential of the Permit. Work commenced in February 2010 and was further expanded in March 2010 to include the Backreef Area in an overall **Independent Coal Measures Assessment Report**. This confidential report has now been received.

In addition OBL has also commissioned independent expert geologist Mr Roger Meaney to provide an **Independent Expert Geologist CSG and Shale Gas Prospectivity Report** for the CSG and shale gas potential of both Areas (**Figure 1**).

Westbury Consulting’s principal conclusions from the **Independent Coal Measures Assessment Report** are:

- The coal which exhibits the best characteristics for potential CSG prospectivity is the Permian Lightjack Formation.
- The specific criteria used for CSG prospectivity are seams >3 m thick and at depths >300 m.
- The coal units of the Lightjack Formation are present at depths required for CSG across the entirety of 5/07-8 EP and the best location appears to be in the vicinity of the Booran-1 well south-east of Derby.
- OBL’s acreage in 5/07-8 EP and the Backreef Area are assessed to have potential coal resources estimated at up to 2 billion tonnes.

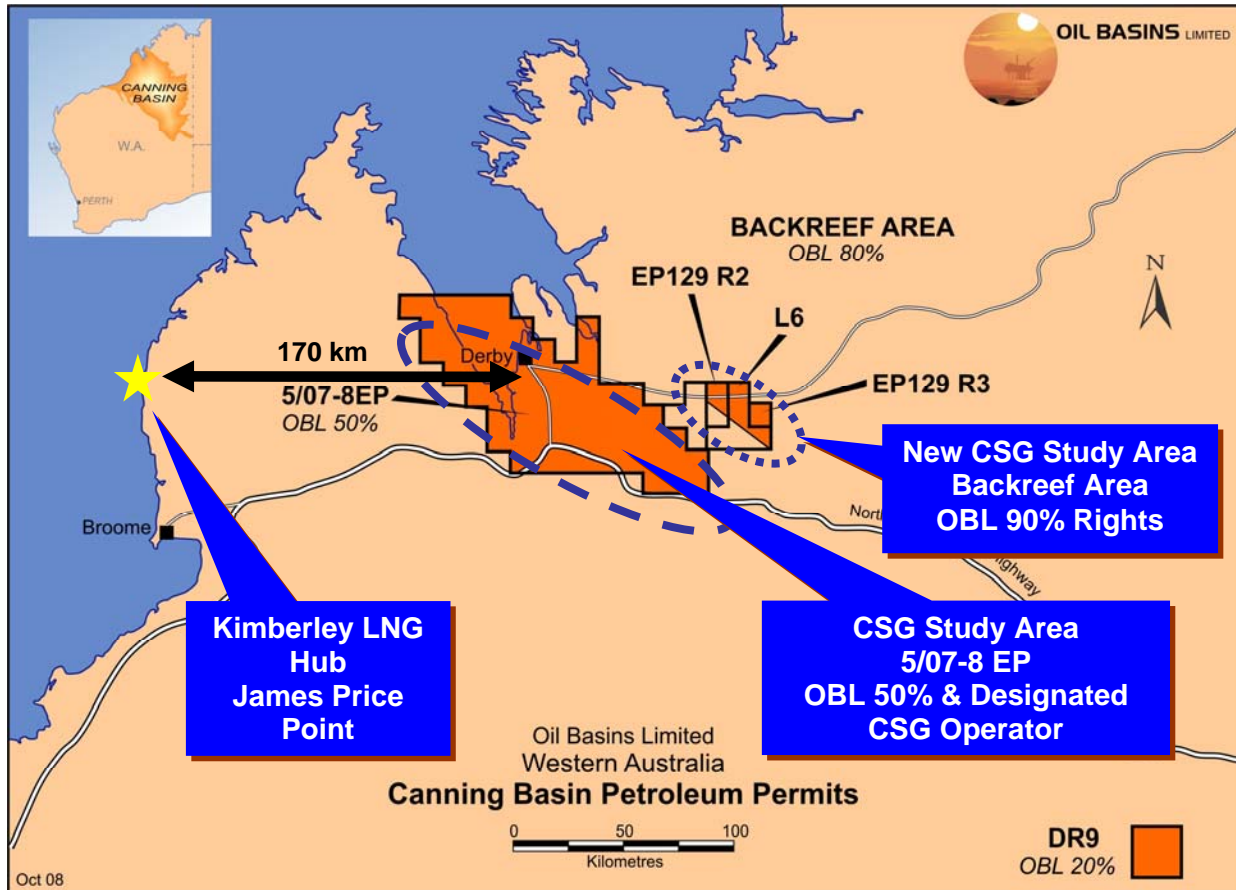
OBL is pleased with these important findings and believes they will underpin the continuing work on the **Independent Expert Geologist CSG and Shale Gas Prospectivity Report** of both Areas, which comprehensive report is expected to be released to the ASX in due course.

Yours faithfully

Kim McGrath  
Chairman

## Independent Coal Measures Assessment Report

On 31 May 2010, Oil Basins Limited (“OBL”) received an independent expert report prepared by Westby Consulting Pty Ltd in response to OBL’s request to complete a desktop study of the coal potential of 5/07-8 EP and the Backreef Area (Figure 1), particularly at depths and the thickness required for Coal Seam Gas (“CSG”) – the specific criteria used for CSG are seams >3 m thick and at depths >300 m.



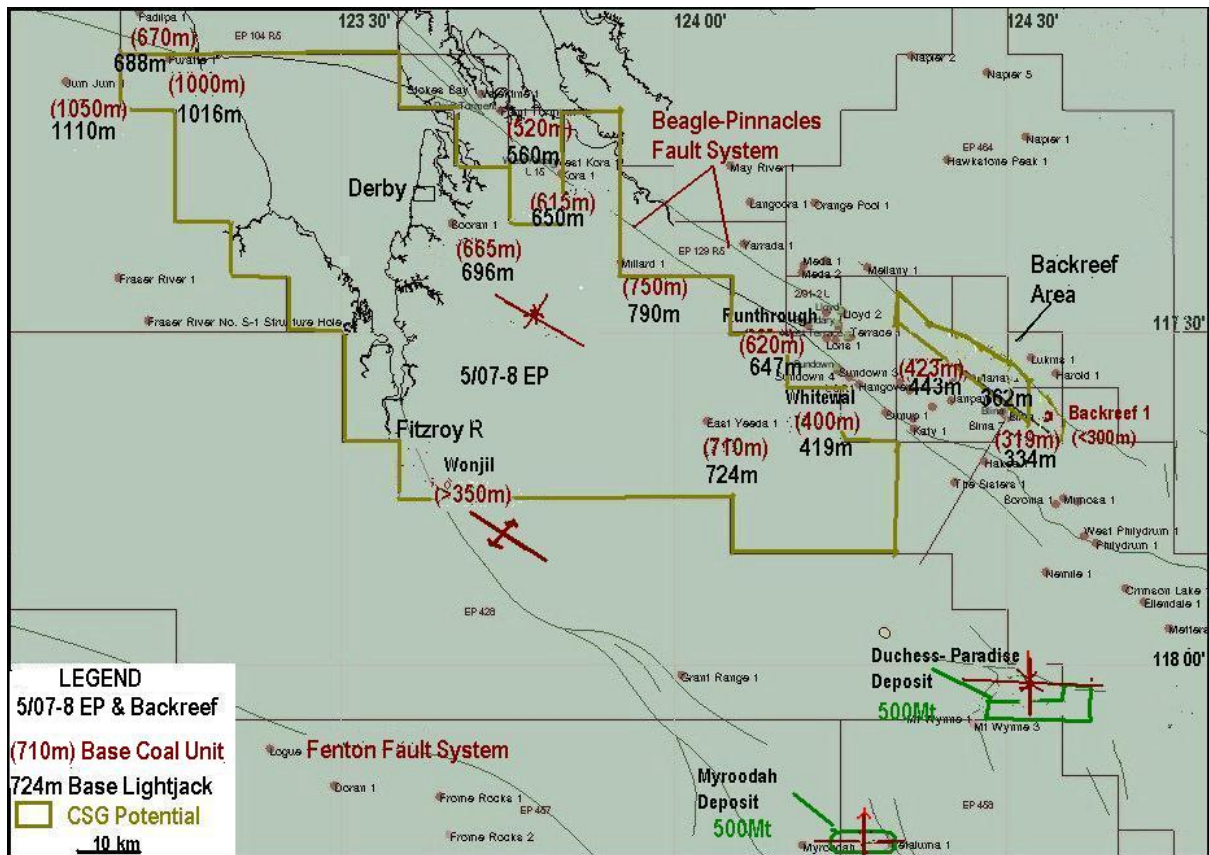
**Figure 1**  
*Oil Basins Limited's Canning Basin interests*

## Principal Findings

Although there has been widespread mineral exploration within the Canning Basin all historic coal exploration has generally concentrated on locating shallow coal near the known out-crop of the Permian Lightjack Formation. The closest explored area is located some 30 km to the south of 5/07-8 EP, consequently no deep mineral exploration holes have been completed in either permit area. Therefore, the depth to the Lightjack Formation coal unit has been interpreted from both oil and water wells and the coal quality characteristics were inferred from known shallow deposits to the south.

**The Lightjack Formation has been interpreted to be present at depths suitable for CSG throughout all of 5/08-8 EP. However, within the Backreef Area, only the portion west of the Sixty-seven Mile Fault System is interpreted to be at a depth >300m (Figure 2).**

South of the Fenton Fault, recent coal exploration by Rio Tinto Exploration (2003/04) discovered an extensive area of high ash content (>45%) shallow coal.



**Figure 2**  
Oil Basins Limited's Canning Coal Bearing Units

### Permit 5/08-8 EP

Esso Exploration's Booran-1 (1982), one of only four wells drilled within the 5,062 sq km of 5/07-8 EP, has recorded coal over a 20 m interval within the Lightjack Formation. It also displays a similar pattern in the downhole geophysics, over the coal unit, to that in Petaluma 1 - indicating the potential for coal depocentres in the style of the Duchess-Paradise and Myroodah deposits in this area.

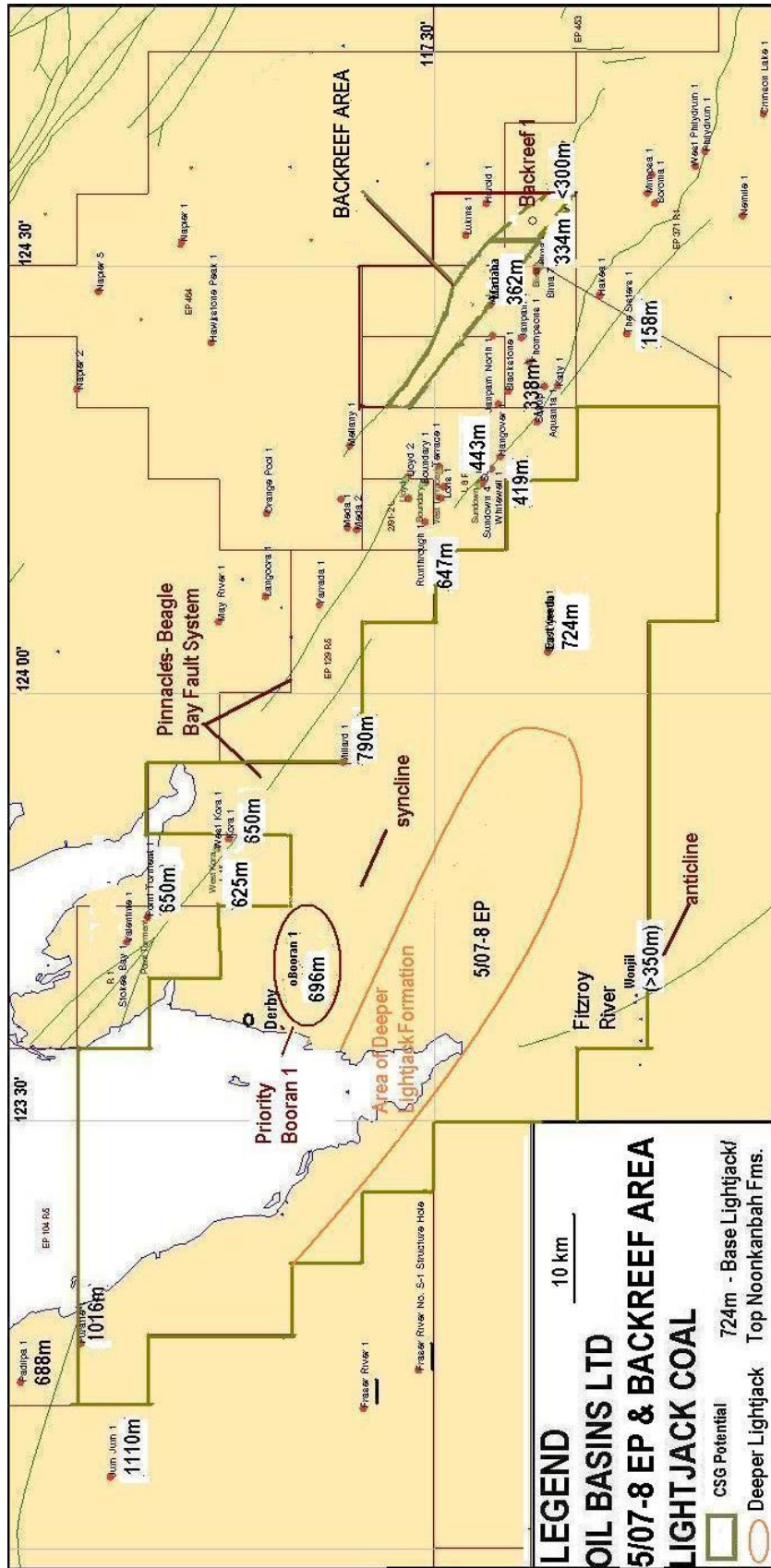
**The proximity of Booran-1 to Derby would make the immediate region a priority exploration target for CSG (Figure 3).**

The downhole geophysical logs in vintage petroleum wells Booran-1, East Yeeda-1, Millard-1 and Puratte-1, within 5/07-8 EP, as well as nearby wells Kora-1, Runthrough-1 and Whitewall-1 all display a similar geophysical signature to Petaluma-1 indicating that the coaly unit of the Lightjack Formation is present over the entire permit. The base of the Lightjack coal unit varies from >350m in Wonjil bore at the south-west corner of 5/07-8 EP to 710 m in East Yeeda-1, 750 m in Millard-1, 665 m in Booran-1 and 615 m in Kora-1. It is stratigraphically located 15-40 m above the top of the Noonkanbah Formation within 5/08-8 EP - this is consistent with previous findings.

**Thus the coal unit of the Lightjack Formation is present at depths required for CSG across the entire Permit (Figures 2 and 3).**

### Backreef Area

Specifically, the planned **Backreef-1** well is designed by OBL to test a much deeper prognosed marine channel prospect, and as sited **will test the Permian Lightjack coal measures** at a sub-optimal location (ie depth to coal is estimated at only 150m) but nonetheless **will enable a core to be cut as Backreef-1 is sited on the down-thrown side of the Sixty-seven Mile Fault System.**



**Figure 3**  
 Oil Basins Prospective Coal Locations within its Canning Basin Interests

### ***Indicative Coal Measures***

Booran 1's well formation log which records coal between 645 - 665m and gas just below this interval, supports the geophysical interpretation used above and indicates the potential for coal depocentres in the style of the Duchess-Paradise and Myroodah deposits in this area.

Given that Rey Resources Ltd has defined two coal deposits some 30 km apart, each with resources in excess of 500 Mt and a strike length in excess of 10 km, then it can be assumed that similar deposits are present within 5/07-8 EP and the Backreef Area at depth.

The Rey Resources Ltd Myroodah–Duchess exploration leases cover an area of around 3000 sq km (their entire Canning Basin licences cover around 8,000 sq km).

**OBL's acreage within 5/07-8 EP and Backreef Area, with CSG potential, is nearly double this area thus inferring a potential coal resource of up to 2 billion tonnes.**