



## PANCONTINENTAL OIL & GAS NL

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# QUARTERLY ACTIVITIES REPORT

## September 2011

### HIGHLIGHTS

- Namibia EL 0037 – new Exploration Licence and Petroleum Agreement awarded, effective 28 June 2011
- Kenya L10A & L10B - review of prospectivity identifies ten strong “leads”. New 2D and 3D seismic planned
- Kenya L8 - Tullow farm-in process completed

### INTERNATIONAL PROJECTS

#### KENYA OFFSHORE BLOCK L8

*Pancontinental Oil & Gas NL – 15%*

##### **Tullow Farmin Completed**

Pancontinental Oil & Gas NL (“Pancontinental”) completed a farmout of part of its interest in Kenya licence L8 to Tullow Kenya B.V. a wholly owned subsidiary of Tullow Oil plc (“Tullow”) by the signed consent of the Minister of Energy of Kenya on 22 September 2011 and by the satisfaction of all other conditions on 27 September 2011. Pancontinental received the signed Ministerial consent on 23 September 2011.

The Kenya L8 consortium now consists of-

Apache Corporation (Operator)	50%
Origin Energy Limited	20%
<b>Pancontinental Oil &amp; Gas NL</b>	<b>15%</b>
Tullow Kenya B.V.	15%

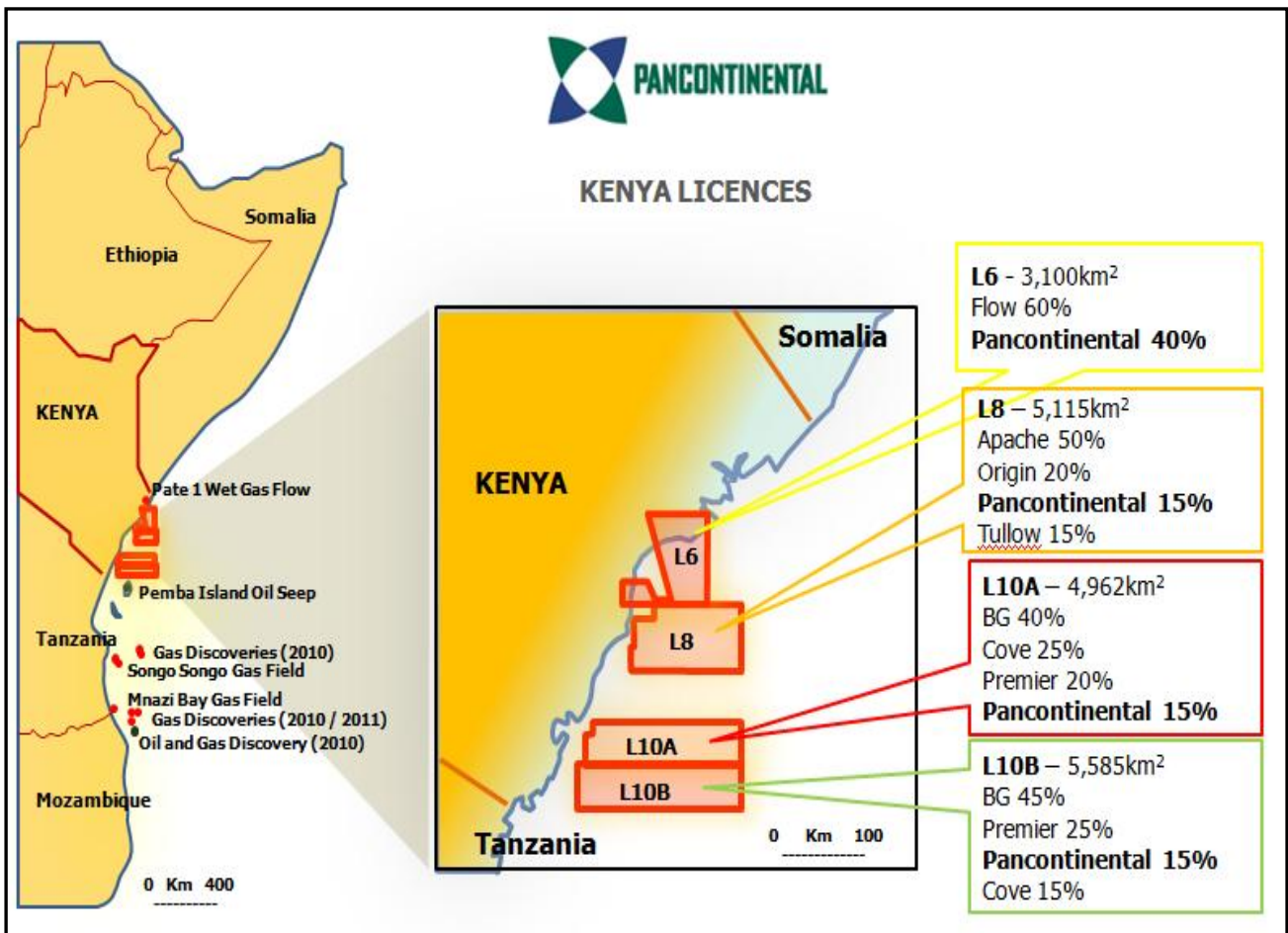
The completion follows the announcement on 7 March 2011 that Pancontinental had signed an agreement with Tullow for Tullow to farm-in to a 10% interest in the licence over offshore Kenya Block L8 that contains the giant Mbawa Prospect. Tullow’s interest has been taken from Afrex Ltd, a wholly owned subsidiary of Pancontinental.

Under the farmout Tullow earns a 10% interest in the licence over offshore Kenya Block L8 from Pancontinental by reimbursing Pancontinental US\$ 1 million for past expenditure in respect of Pancontinental’s interest and spending a further US\$9 million to “carry”

Pancontinental though the next part of the L8 work programme, including drilling the Mbawa Prospect. Tullow will also pay for its own 10% of expenditure.

Pancontinental will retain a 15% interest in L8 and after the first earning phase Tullow will have an option to earn a further 5% by providing further funding on its own and on Pancontinental’s behalf. Based on current budgets, under the first part of the farmout Tullow will “free carry” Pancontinental through a major portion of the L8 programme that includes drilling the giant Mbawa Prospect.

Tullow is one of the most successful petroleum exploration companies of recent times in Africa, both onshore and offshore.



### Kenya L8 Prospectivity

L8 covers 5,114.9 sq km offshore Kenya in water depths from 100m to 1,300m.

Block L8 holds several attractive large exploration objectives, the largest being the Mbawa Prospect, a large and complexly faulted anticline mapped on 3D seismic data with potential for both oil and gas at inferred Cretaceous and Jurassic reservoir levels.

Seismic 3D data indicate that the Mbawa structure is intact and is very large at a number of prospective levels. “Flat spots” or “DHI’s” can be seen over the Prospect. Pancontinental’s interpretation is consistent with a gas column of about 100m overlying a

significant oil column but this interpretation can only be validated by drilling.

Pancontinental interprets an extensive deep oil and gas generating “kitchen” near the Mbawa Prospect, extending to the north into area L6. Sea surface “slicks” interpreted from satellite data support the concept of oil generation, expulsion and migration from the kitchen area and Mbawa itself. As well as Mbawa, other prospects in L8 and neighbouring L6 also have high volumetric potential and are also associated with interpreted slicks. The interpreted natural oil slicks are considered to be derived from sea floor “pockmarks” on the flank of the structure.

While there is no direct evidence that the Mbawa Prospect contains any oil or gas until drilling has taken place, volumetric estimates indicate that, if filled to spill point and subject to risks that include trap integrity and the fact that the offshore Lamu Basin petroleum system is unproven, Mbawa has in-place and unrisks potential to contain at the **Tertiary- Cretaceous** level –

- **up to 4.9 Billion Barrels of oil (P10) plus**
- **a gas cap of 284 Billion Cubic Feet (P10)**

It is estimated that Mbawa has in-place an unrisks potential to contain at the deeper **Top Jurassic** level –

- **up to 323 Million Barrels oil (P10) or**
- **525 Billion Cubic Feet gas (P10)**

but these are subject to risks that include the fact that there is limited data for reservoir parameters on the East African margin, there is no control on interpretation of Jurassic carbonates and the lack of a commercial discovery of hydrocarbons in Jurassic carbonates on the East African margin.

The geological parameters used in estimating the volumetric potential have been drawn from regional data and modelling of worldwide geological systems and may not necessarily reflect the parameters in place in the Mbawa Prospect. The P10 potential volumes quoted are only possible if the Prospect is filled to spill point and the interpretation and estimated parameters prove to be valid. There is no direct evidence that the Prospect contains any oil or gas and it is possible that the Prospect may be only partially filled or contains no hydrocarbons. Recoverable reserves are lower than in-place volumes and are subject to a number of factors that are not estimated in the quoted volumetric potentials. Only drilling and further assessment can determine the actual volumes (if any) of oil or gas in place or recoverable.

While the P10 potential is regarded as the maximum in-place and unrisks potential, corresponding **P Mean** potentials in place, subject to the same risks as those outlined above for the P10 estimates, are -

**Tertiary / Cretaceous potential –**

- **2 Billion Barrels (P Mean) oil plus**
- **a gas cap of 196 Bcf (P Mean)**

## **Jurassic potential –**

- **138 Million Barrels (P Mean) or**
- **231 Bcf (P Mean)**

### **Mbawa Drilling**

Several of the major culminations on the overall Mbawa Prospect may be locations for drilling. Planning for drilling has commenced. The timing of drilling is subject to a number of factors including the completion of that review and interpretation, equipment lead-times and the availability of a suitable drilling rig.

Operator Apache is examining the availability of drilling rigs that are suitable for drilling the Mbawa Prospect. A suitable rig and the Mbawa drilling date will be set after further discussion with rig operators.

### **KENYA ONSHORE / OFFSHORE BLOCK L6**

*Pancontinental Oil & Gas NL – 40%*

The L6 licence area is adjacent and geologically continuous to L8.

Following encouraging hydrocarbon generation and migration studies, the joint venture has shifted its attention to the offshore portion of the licence area. A deep central graben in this area is considered to be an oil and gas “source kitchen” and potential hydrocarbon trapping prospects have been identified immediately adjacent to this area.

The most prospective offshore areas contain a number of known prospects and leads adjacent to the interpreted “source-kitchen”. The largest of these is the Kifaru Prospect in water depths of 80m to 100m in the southwest of the licence area.

A 3D seismic survey area has been laid out over Kifaru and another prospect.

During the quarter the joint venture continued planning for the 3D survey and continued to seek a farminee for 3D seismic acquisition over the Kifaru Prospect and other prospects in 2011 and drilling in 2012.

### **KENYA OFFSHORE BLOCKS L10A & L10B**

*Pancontinental Oil & Gas NL – 15%*

On 18 May Pancontinental announced that, together with three co-venturers and led by operator BG Group plc, it signed new Production Sharing Contracts (“PSCs”) over offshore exploration Blocks L10A and L10B with the Government of Kenya. The signing by the Minister of Energy of Kenya and the consortium took place in Nairobi on 16 May 2011 and the Effective Date for the licences is 17 August 2011.

The new areas more than double Pancontinental’s gross acreage position offshore Kenya. The proposed work programme includes 2D and 3D seismic surveying in the first phase and drilling in later phases. Pancontinental holds a 15% interest in each new PSC.

### **Initial Prospectivity Review**

Offshore East Africa has become an industry focus through major deepwater gas discoveries and an oil discovery offshore Tanzania and Mozambique. Pancontinental Oil

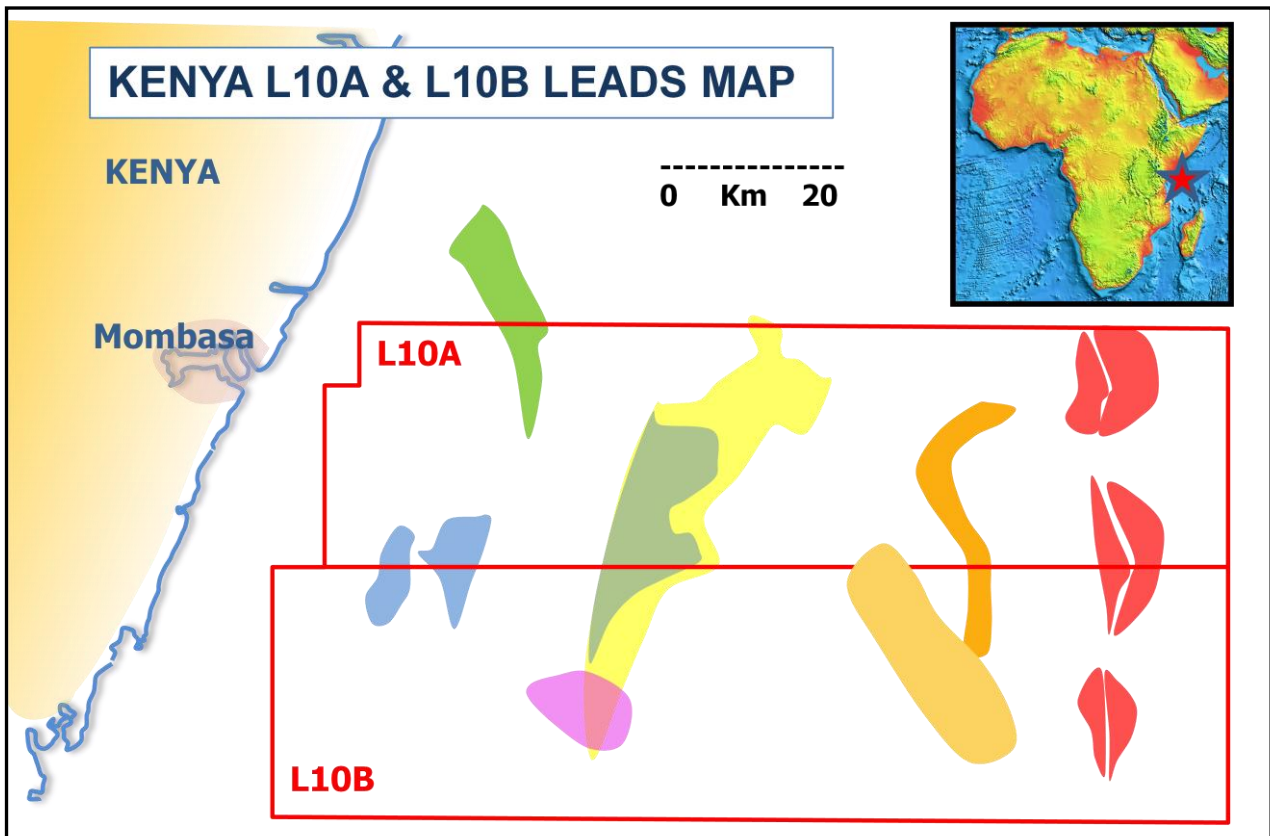
& Gas NL (“Pancontinental”) has interests in four exploration blocks in East Africa, offshore Kenya.

An initial L10A & L10B review by operator BG Group has identified more than ten strong “leads” for follow-up by 3D and 2D seismic surveys. The leads are geologically varied, with six “play types” identified. Extensive 3D and 2D seismic surveys are planned for later in 2011 and 2012

Several of the leads have a similar character and are on-trend south of the giant Mbawa Prospect in L8 (Pancontinental 15%). These leads are large anticlinal features.

A number of other leads have potential in different parts of the geological section, including a large Upper Jurassic “reef”, Cretaceous and Tertiary channel and turbidite sands and Miocene reefs.

A number of the leads have been selected for further work including seismic coverage commencing later in 2011 with the aim of bringing these to Prospect status.



### Forward Work Programme

Following the prospectivity review the joint venture has commenced planning for extensive 3D and 2D marine seismic surveys over the main leads. The general locations of the surveys have been determined and the project operator is seeking a seismic vessel for the data acquisition.

On current planning the seismic acquisition will commence in late 2011 and processing should be completed mid 2012.

The 3D survey of approximately 2,200 sq km will cover 6 leads in the eastern part of the Blocks, while the 2D survey of 970 linear km will cover other leads, including a Miocene reef trend in the western part of the Blocks. The aim of the surveys is to identify the most prospective prospects for drilling. While the 3D acquisition is planned for the east of the areas and 2D in the west, precise locations will be determined in due course. Two wells are required under the licences in the second exploration period commencing in August 2013. Other planned work includes geological field sampling, gravity field attribute studies, heat flow modelling, seismic test reprocessing, basin modelling and seismic attribute studies.

### **L10A & L10B Joint Ventures**

The L10A and L10B joint ventures consist of-

	<u><b>L10A</b></u>	<u><b>L10B</b></u>
BG Group plc	40%	45%
Premier Oil Investments Limited	20%	25%
Cove Energy plc	25%	15%
<b>Pancontinental Oil &amp; Gas NL</b>	<b>15%</b>	<b>15%</b>

L10A and L10B have respective areas of 4,962.03 sq km and 5,585.35 sq km and water depths of 200 to 1,900m, well within the reach of modern engineering technology.

Pancontinental has been surprised by the diversity and size of the leads and plays identified in the operator's initial review of L10A and L10B.

Under the "fast track" concept for the Blocks, the locations for the 3D and 2D seismic surveys have been set by the Joint Venture for acquisition later in 2011.

The surveys aim to identify Prospects for drilling in the 2013 licence year and with such a diversity of leads we are very likely to have several attractive candidates for drilling.

Offshore East Africa has become an industry focus through recent major deepwater gas discoveries and an oil discovery offshore Tanzania and Mozambique. Further drilling is under way in these areas south of Kenya and more drilling rigs are being brought to the region.

### **NAMIBIA OFFSHORE WALVIS BASIN EL 0037**

***Pancontinental Oil & Gas NL – 85%***

#### **Petroleum Agreement and Petroleum Exploration Licence**

Pancontinental Oil & Gas ("Pancontinental") announced that on 4 July 2011 it had received a signed Petroleum Agreement ("PA") and Petroleum Exploration Licence No. 0037 ("EL") from the Ministry of Mines and Energy of the Republic of Namibia, effective 28 June 2011. The PA and EL area is located in the Walvis Basin offshore northern Namibia.

The location of the PA and EL was selected over approximately 17,295 sq km after an earlier Reconnaissance Licence held by Pancontinental.

The EL gives exclusive rights to the holders for a first exploration period of four years followed by two additional periods of two years each and also provisions for the continuation of the exclusive rights under any oil or gas development.

Pancontinental holds the PA and EL 85% with Namibian participant Paragon Holdings (Pty) Ltd (“Paragon”) 15%. In exchange for certain rights under a Joint Venture Agreement with Paragon, Pancontinental has agreed to “free carry” Paragon until the commencement of the development of any oil or gas discovery.

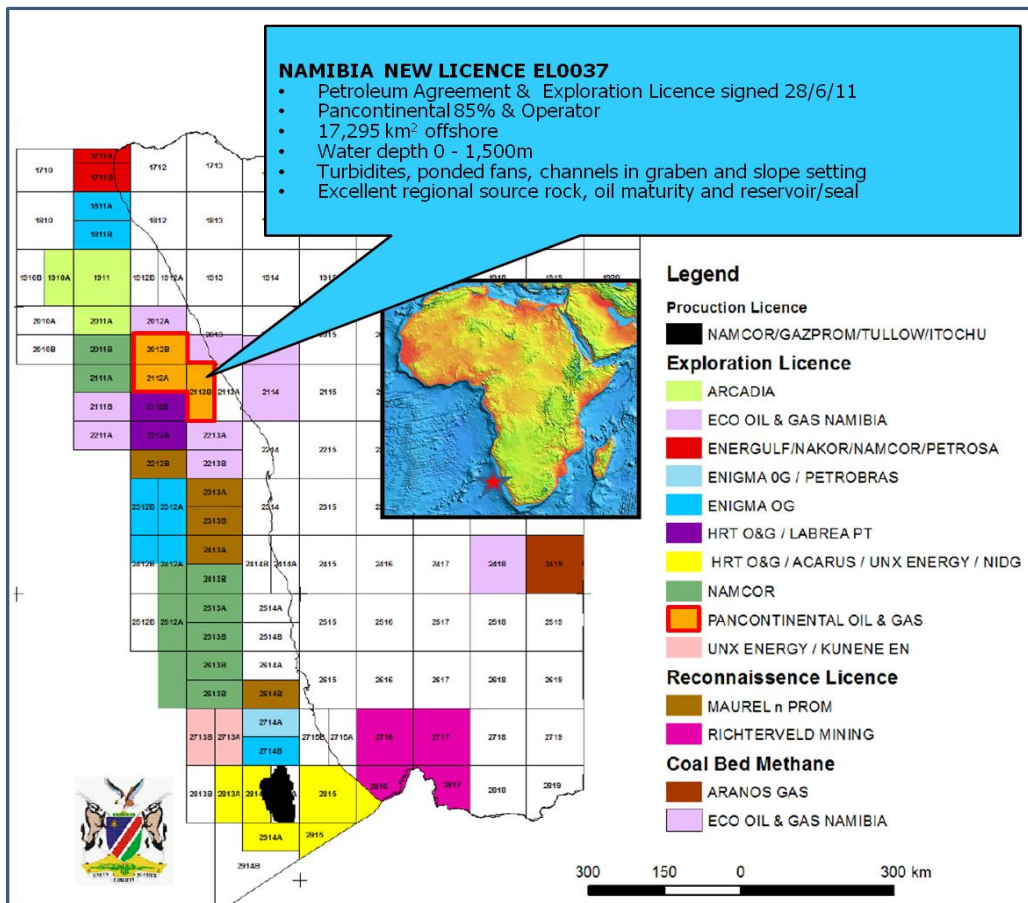
**Prospectivity offshore Namibia**

Offshore Namibia is attracting significant international interest as an emerging oil and gas province in southwest Africa.

In Pancontinental’s opinion offshore Namibia has the potential to hold very large oil and gas reserves and it is significantly under-explored. The very large Kudu Gas Field offshore Namibia is under development by Tullow Oil plc, and other companies are actively exploring the margin for oil.

Offshore Namibia is the plate tectonic “conjugate” of offshore Brazil, where world-scale oil and gas discoveries have been made in recent years and it lies on the West African continental margin adjacent to Angola, where there have also been major oil discoveries.

Pancontinental will explore the ponded basin floor turbidites, slope fans and channels seen under the company’s earlier Reconnaissance Licence. These targets are associated with a restricted graben trough interpreted to hold the rich and mature oil source rocks identified in regional wells.



### **MALTA OFFSHORE AREA 5; AREA 4, BLOCK 3**

*Pancontinental Oil & Gas NL - 80%*

Activities on the company's Malta areas have been suspended since September 2005 under force majeure provisions of the ESA due to border issues between Malta, Libya and Tunisia. The Company is seeking a means of restarting exploration in the licence area as soon as possible and has been in negotiations with the Maltese authorities.

On 22 July, the Company, as joint venture Operator, met again with the Ministry in Malta and continued negotiations of a revised ESA.

## **AUSTRALIAN PROJECTS**

### **EP 104 / R1 ONSHORE CANNING BASIN**

*Pancontinental Oil & Gas NL – 10%*

Petroleum Retention Lease R1 was renewed by the Minister of Mines and Petroleum of Western Australia for a period of five years from 8 November 2010.

The joint venture will now undertake an examination of the prospectivity of the licence areas and plan a new forward exploration programme.

The Company is examining the future potential and value of this project.

### **L15 ONSHORE CANNING BASIN**

*Pancontinental Oil & Gas NL – 12%*

Pancontinental and its co-venturers have been granted Petroleum Production Licence L15 over the West Kora-1 oil discovery well in the Canning Basin of Western Australia. The licence is for 21 years commencing 1 April 2010.

West Kora-1 was drilled in 1984 and produced some 20,000 Barrels of oil during an extended production test, commencing at a rate of 350 BOPD.

The L15 Joint Venture aims to upgrade the existing production facility and restore oil production from West Kora -1.

With improvements in technology and significantly higher oil prices, revived production from West Kora-1 could be feasible now that the Production Licence has been secured.

The Company is examining the future potential and value of this project.

### **EP 424 OFFSHORE CARNARVON BASIN**

*Pancontinental Oil & Gas NL – 38.462%*

EP 110 is operated in conjunction with EP- 424. The parties in EP-110 have identical equities to those in permit EP-424.



Commercial negotiations to gain access to the entire Baniyas prospect have reached a point where the Operator is of the view that there is little likelihood that the adjoining acreage can be secured.

Following a technical review of the Baniyas potential and because of the absence of success in extending Joint Venture access over all of the Baniyas Prospect, it was decided to consider selling or otherwise disposing of the licences.

### **EP 110 ONSHORE CARNARVON BASIN**

*Pancontinental Oil & Gas NL - 38.462%*

This permit is operated in conjunction with EP- 424. The parties in EP-110 have identical equities to those in permit EP-424.

Following a technical review of the Baniyas potential in EP 424 and because of the absence of success in extending Joint Venture access over all of the Baniyas Prospect, it was decided to consider selling or otherwise disposing of the licences.

### **EP 406 OFFSHORE SHARK BAY, CARNARVON BASIN**

*Pancontinental Oil & Gas NL – 5%*

Permission is awaited to explore this area, which is subject to a Marine Park and World Heritage Listing.

## **NEW VENTURES**

(i) New licence EL 0037 was acquired offshore Namibia- see EL 0037 section above.

(ii) Pancontinental continued to examine a number of new exploration opportunities in Africa.

## **CORPORATE**

### **Personnel**

The Company has appointed Ger Kegge as local representative in Namibia. Mr Kegge is an experienced oil and gas operative having previously worked for Shell and Tullow. This appointment confirms and demonstrates Pancontinental's commitment to Namibia and will give the Company a presence for future opportunities as well as managing our current acreage.

### **Marketing**

During the quarter the CEO and Finance Director carried out a series of presentations in London followed by roadshows in Sydney and Melbourne.

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*The summary report on the oil and gas projects is based on information compiled by Mr R B Rushworth, BSc, MAAPG, MPESGB, Chief Executive Officer of Pancontinental Oil & Gas NL. Mr Rushworth has the relevant degree in geology and has been practising petroleum geology for more than 30 years. Mr Rushworth is a Director of Pancontinental Oil & Gas NL and has consented in writing to the inclusion of the information stated in the form and context in which it appears.*