



**PANCONTINENTAL**

**PANCONTINENTAL OIL & GAS NL**

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## QUARTERLY ACTIVITIES REPORT March 2013

### HIGHLIGHTS

- **Offshore Kenya**
  - Anadarko Petroleum announces non-commercial oil shows in first of two wells offshore Kenya, for the first time proving a working oil system
  - Second Anadarko Petroleum well proceeding east of L10A & L10B
- **Offshore Namibia**
  - First of multiple wells commenced by HRT in adjacent acreage
- **Kenya L8**
  - Mbawa 1 gas discovery continues to be assessed by operator Apache
  - L8 JV considering second well on deeper oil play
- **Kenya L10A & L10B**
  - Major Prospects mapped using new 3D data, including multiple Miocene reefs
  - Potentially a 2 well drilling programme commencing late 2013
- **Kenya L6**
  - Prospective Resources estimated at 3.7 billion barrels of oil or 10.2 trillion cubic feet of gas
  - Additional acreage secured, regaining previous relinquished acreage
  - L6 JV seeking a farminee for drilling in 2013
- **Namibia EL 0037**
  - Multiple leads identified and EL 0037 JV seeking a farminee for drilling
- **Corporate**
  - Cash balance of \$35.3 million
  - Additional African oil and gas opportunities under review

Pancontinental Oil and Gas NL ("Pancontinental", the "Company") is pleased to present the following report on activities for the quarter ending 31 March 2013.

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## INTERNATIONAL PROJECTS

### KENYA

#### KENYA OFFSHORE REGIONAL ACTIVITIES

On 18 April 2013, Anadarko Petroleum (“Anadarko”) announced oil shows in reservoir quality rocks in Kubwa 1, the first of its two current wells offshore Kenya. The Kubwa well in L7 is east of Pancontinental’s L6 area. The shows are regarded as non-commercial.

For the first time, an oil generating system has been proven by the Kubwa well offshore Kenya, in addition to the gas system proved by the Mbawa 1 gas discovery by Pancontinental and its L8 partners in 2012.

Reservoir quality sands were penetrated by Kubwa in deeper water, similar to the major gas discoveries offshore Mozambique and Tanzania.

Anadarko will now commence drilling the Kiboko well to the east of Pancontinental’s L10A and L10B licence areas offshore southern Kenya.

Anadarko announced -

“Anadarko also completed drilling its Kubwa well in the L-07 Block offshore Kenya, which encountered non-commercial oil shows in reservoir-quality sands.

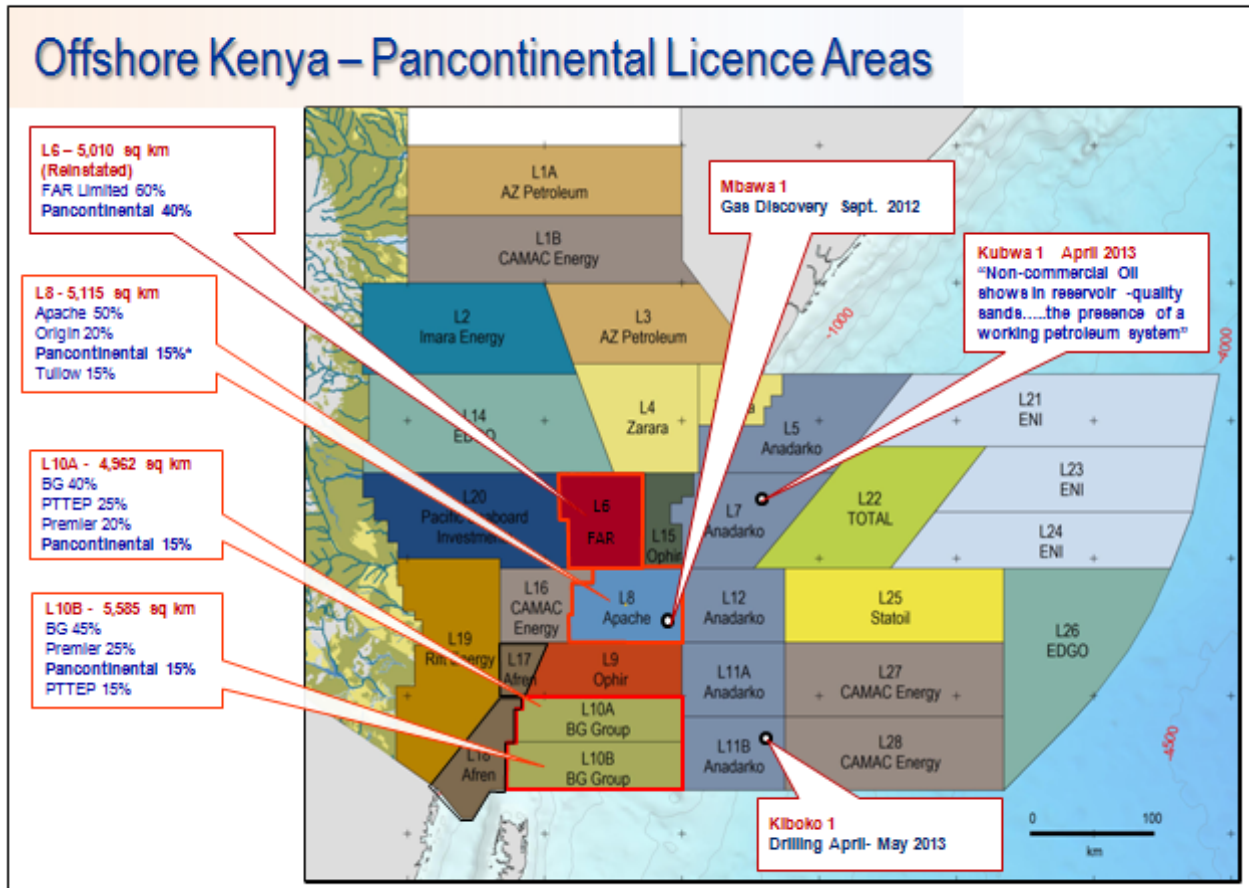
“We are very encouraged with our first test of Kenya's previously unexplored deepwater basin, in which mudlog and well-site evaluation of core data indicates the presence of a working petroleum system with reservoir-quality sands,” Daniels [Anadarko Sr. Vice President, Worldwide Exploration] said”.

Mr Barry Rushworth, CEO and Executive Director of Pancontinental commented -

*“This is an exciting development in the Kenyan context.*

*Based on the limited information publicly released by Anadarko it appears that an oil generating system offshore Kenya has been proven. This is very encouraging and we remain confident that with a greater understanding of the area and the considerable upcoming drilling activities offshore Kenya, Pancontinental is well positioned to unlock a commercial discovery.“*

Pancontinental has an inventory of more than 40 Prospects and Leads offshore Kenya and is well funded over the coming 12-18 months for up to four wells (one well depends on the completion of a farm-out in Block L6).



**Figure 1: Map of Licence Areas Offshore Kenya**

**KENYA OFFSHORE BLOCK L8**

***Pancontinental Oil & Gas NL 15%\****

L8 covers 5,114.9 sq km offshore Kenya in water depths from 100m to 1,300m. The licence is operated by Apache Corporation, and other Joint Venture participants are Origin Energy and Tullow Oil.

**Mbawa 1 Discovery**

The Mbawa Prospect, drilled during August and September 2012, is the first of numerous prospects and leads drilled in Pancontinental’s four licence areas offshore Kenya.

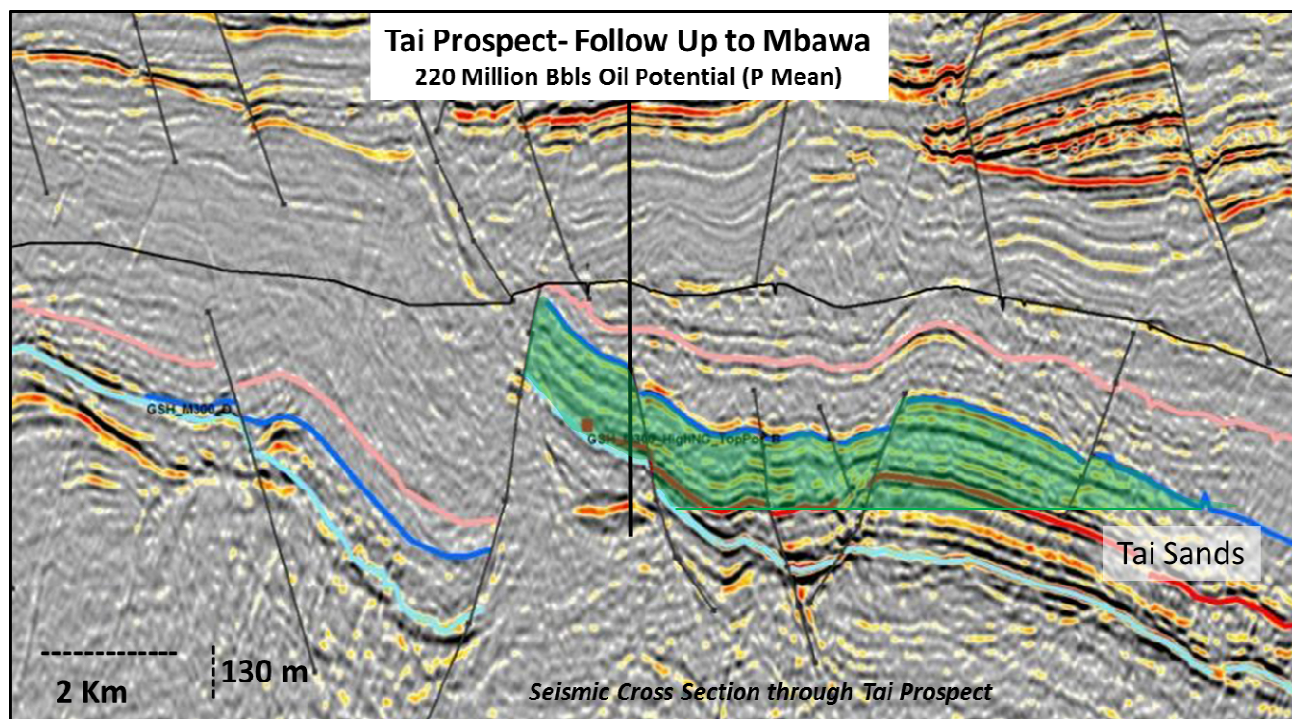
Mbawa 1 is the first natural gas discovery in the northern part of the East African offshore margin. The three discovery zones have 51.8 net metres (~170 feet) of natural gas pay in channel and turbidite sandstones with favourable reservoir characteristics.

The potential of the remainder of the four-way Mbawa dip closed 160 sq km (40,000 acre) structure remains to be assessed.

**L8 - Forward Exploration Programme**

Following the Mbawa 1 discovery a major, second, deeper play type has yet to be tested and a second well is being considered. The deeper play is regarded as being oil, rather than gas prone. The L8 Joint Venture has yet to make a formal decision on the second well.

The Tai Prospect is amongst a number of main prospects under consideration. The Tai Sands of interpreted Middle Cretaceous age are deeper than the discovery sands in Mbawa 1 and are considered to potentially be in a separate petroleum system that is more favourable to trap oil (see Figure 2 below).



**Figure 2: Seismic Cross Section Through Tai Prospect**

Mbawa 1 was the first recent well and the first ever discovery offshore Kenya.

The second recent exploration well, Kubwa 1, drilled by Anadarko in March-April 2013 has proven an oil generating system offshore Kenya.

Oil remains Pancontinental's prime focus offshore Kenya and the deeper levels and numerous other prospects at various levels remain untested and are the subject of current exploration work.

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

***Pancontinental Oil & Gas NL – 15%***

L10A and L10B have respective areas of 4,962.03 sq km and 5,585.35 sq km in water depths of 200 to 1,900m.

The L10 projects are operated by BG Group in a joint venture including Premier Oil and PTTEP (following the takeover of Cove Energy plc).

### **New 3D Seismic Survey Completed**

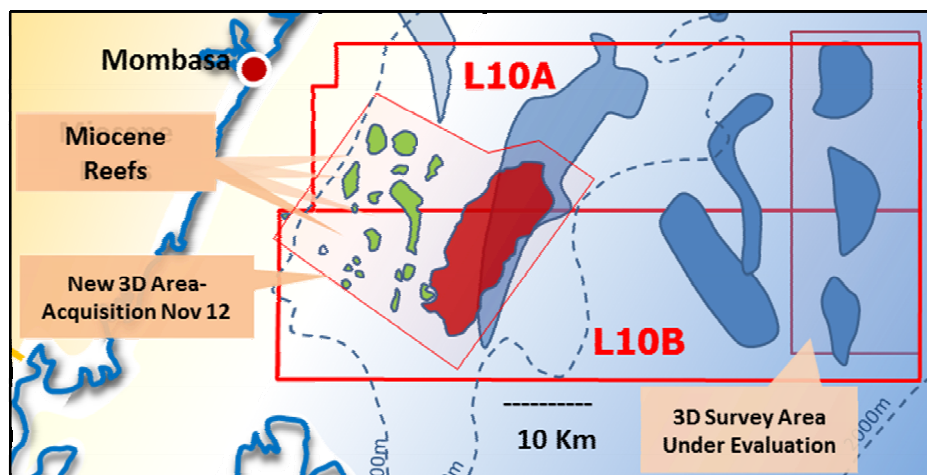
The L10A and L10B joint venture completed a new 3D survey in the western portion of the licence areas in January 2013.

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Previous 2D and 3D seismic surveys were undertaken late 2011 / early 2012. The new 3D survey covers a cluster of large Miocene reefs and the large Crombec Lead. These leads are possible drilling targets.

The new 3D survey covers the area shown below in Figure 3.



**Figure 3: Blocks L10A and L10B- New 3D Seismic Survey**

The joint venture now has excellent coverage totalling 4,783 square kilometres and identifying a large number of leads and prospects.

### **Current Mapping Work**

Processing and interpretation of the 2D and 3D data is ongoing and preliminary results are very encouraging.

In the western sector of the L10A and L10B areas, the joint venture operator BG Group has mapped a number of large leads for further work and possible drilling. These have been covered by the new 3D survey.

The largest leads in the western sector are-

(i) A cluster of more than 10 interpreted Miocene Reefs. Miocene reefs are known globally to have very high per-well production potential. The L10 reefs are in water depths of approximately 500m and within 50km of the major Kenyan port of Mombasa.

(ii) The Crombec Prospect is a large anticline in the western sector of the areas. Crombec has four-way dip closure from the Tertiary to the Lower Jurassic. It has sands onlapping the crest, indicating a likely growth structure. A possible geological analogue is the Songo-Songo field offshore Tanzania.

In the eastern sector of the areas, mapping continues on a number of Prospects and play types. Two of the diverse play types are-

(i) An extensive system of Tertiary channels. The channels in L10A and L10B may be gas charged, possibly representing a very large resource.

(ii) Structural Leads in the Tertiary to Cretaceous section. Some of the Leads are dip reversals associated with a fault. These have stacked potential within Tertiary stacked channels and Cretaceous thrust and sub-thrust plays.

## Drilling Plans

The L10A and L10B joint ventures are considering drilling commencing in Q4 2013.

## KENYA ONSHORE / OFFSHORE BLOCK L6

*Pancontinental Oil & Gas NL – 40%*

The L6 area is the northernmost of Pancontinental's four areas offshore Kenya.

L6 covers approximately 5,010 sq km (following a recent reinstatement of relinquished acreage), with about one quarter onshore and the rest offshore to 400 meters water depth. L6 is areally and geologically continuous to L8.

Area L6 lies in the Lamu Basin and within the Tana River delta, north of recent world-scale natural gas discoveries off the coasts of Mozambique and Tanzania.

The L6 joint venture is operated by FAR Limited (ASX: FAR). The L6 joint venture group intends to seek a farminee for drilling in 2013.

### Additional Acreage Secured

On 27 March 2013 previously relinquished acreage was reinstated to L6, bringing the total area to 5,010 sq km. The previous area was 3,100 sq km.

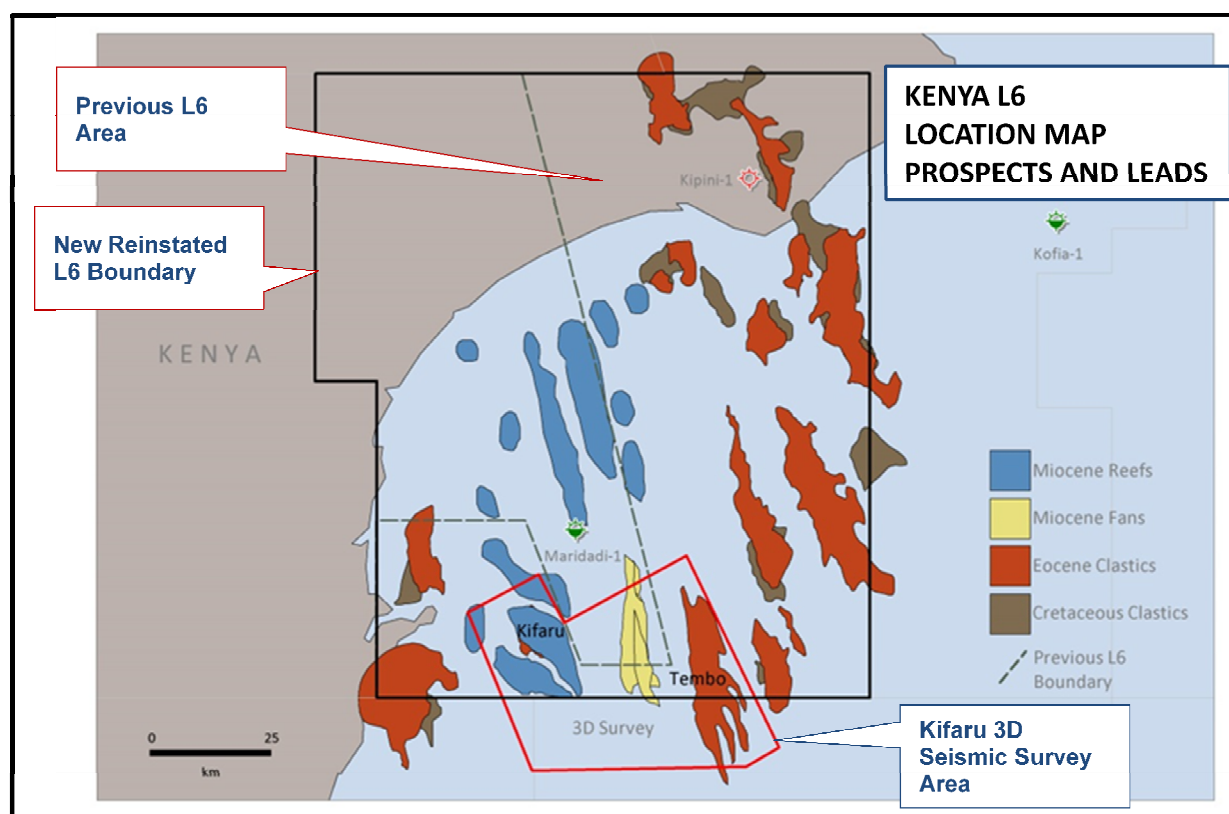


Figure 4: Map of Enlarged L6 Licence Area

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## Prospective Resource Estimates

According to an assessment by operator FAR Limited, the L6 area has potential to contain approximately 3.7 billion barrels of oil or 10.2 trillion cubic feet of gas prospective resources on a Gross, un-risked, best-estimate basis.

The three prospects covered by new 3D seismic (Kifaru, Kifaru West and Tembo) have combined potential for approximately 630 million barrels of oil on an un-risked, best estimate, undivided 100% basis.

The prospective resource estimations are derived from new 3D and older 2D seismic data.

Pancontinental's 40% share of the Gross prospective resources is 1.48 billion barrels of oil or 4.08 trillion cubic feet of gas (subject to the matters described in the footnotes below).

The details of the prospective resource estimates are shown in Table 1 below.

Prospect	Play	Unrisked Prospective Resources					
		Low Estimate		Best Estimate		High Estimate	
		Oil (mmbbls)	Gas (bcf)	Oil (mmbbls)	Gas (bcf)	Oil (mmbbls)	Gas (bcf)
<b>Prospects defined on 3D seismic</b>							
Kifaru	Miocene reef	34	104	178	517	849	2,321
Kifaru West	Miocene reef	30	87	130	388	545	1,579
Tembo	Eocene clastics	91	227	327	807	1,212	2,907
<b>Prospects defined on 2D seismic</b>							
11 Prospects	Miocene reef	297	821	1,249	3,461	5,194	14,032
13 Prospects	Eocene clastics	451	1,287	1,743	4,515	6,582	16,132
6 Prospects	Late Cretaceous clastics	21	101	126	547	684	2,808
<b>Total Gross</b>		<b>925</b>	<b>2,627</b>	<b>3,754</b>	<b>10,235</b>	<b>15,066</b>	<b>39,779</b>

**Table 1: Table of L6 Unrisked Prospective Resources\*\***

From the new 3D data three prospects have been mapped, Tembo, Kifaru and Kifaru West, with prospective oil equivalent resources of 327, 178 and 130 million barrels respectively (un-risked best estimate, 100% basis).

In a gas only success case the respective volumes are 807, 517 and 388 billion cubic feet of gas. The chances of a discovery have been assessed at respectively 21%, 19% and 18%.

The Kifaru Prospect and Kifaru West Prospects are interpreted to be large stacked Miocene reefs, with interpreted good lateral and top seals and close proximity to mature Eocene source rocks.

Tembo is a large tilted fault block trap, with interpreted sandstone reservoirs at a number of levels.

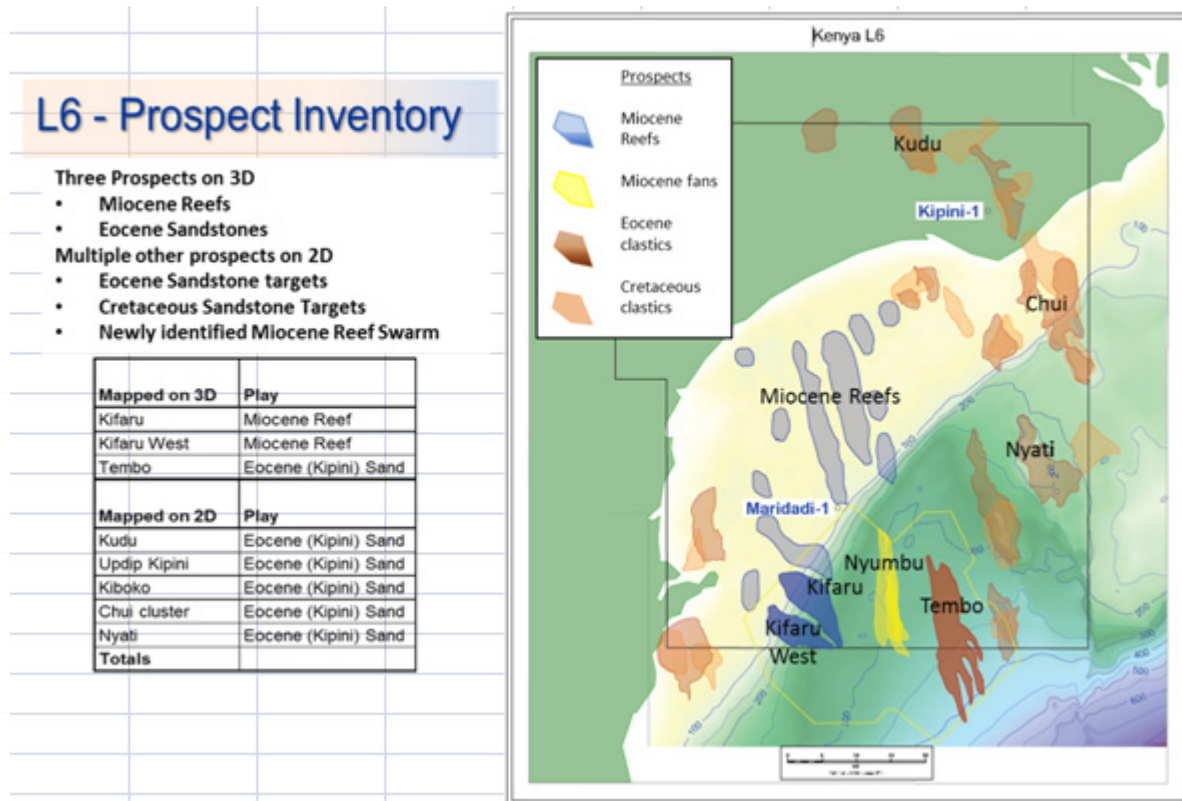
In respect of the Competent Persons Statement regarding the prospective resource estimates, the reader is directed to the announcement of 27 February 2013 by FAR Limited.

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## L6 Prospect Inventory and Forward Programme

A number of oil and gas play types and prospects have been mapped and on this basis the location of the first exploration well will be selected (See Figure 5 below).

Following the reinstatement of a previously relinquished area, re-examination of 2D seismic data has revealed a cluster of interpreted Miocene Reefs that will be subject to further mapping. These reefs are on trend and north of the Kifaru Prospect, also a stacked Miocene reef.



**Figure 5: L6 Prospect Inventory**

The offshore Kifaru, Kifaru West and Tembo Prospects and the onshore Kudu Prospects are the main exploration targets in the L6 area.

The L6 Joint Venture will select a prospect for drilling after the receipt of the final 3D seismic survey results expected in Q2 2013. Planning for drilling in 2013 has already commenced and an Environmental Impact Assessment is well advanced.

L6 is proving to be a very exciting block and with a high level of activity planned offshore Kenya in 2013 and the recent Mbawa gas discovery in adjacent block L8, the L6 Joint Venture is in a strong position to secure a farminee partner for drilling.

### Kifaru 3D Survey Processing and Mapping Continues

The Kifaru 3D seismic survey of 778 sq km was completed in July 2012 over the Kifaru and Tembo Prospects in the southern offshore portion of L6.

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The “fast track” results of the Survey have already been mapped. These are very encouraging and the Joint Venture is continuing to map prospects for a first exploration well planned for later in 2013.

The Kifaru, Kifaru West and Tembo Prospects are the main drilling candidates in water depths of 80m to 150m in the south of the L6 area.

Specialised processing of the data is ongoing and full mapped results are now expected Q2 2013.

### **Kifaru and Kifaru West Prospects**

The early 3D data show that the Kifaru and Kifaru West Prospects are stacked series of Oligo-Miocene reefs. Good quality oil-mature source rocks are interpreted in the Eocene below and adjacent to the reefs in the Maridadi Trough.

Miocene reefs worldwide host very large oil and gas reserves and often have very high per-well production rates. Clusters of Miocene reefs offer multiple follow-up potential after a first discovery.

The Kifaru Prospect and Kifaru West Prospect each cover approximately 30 sq km.

Approximately 20km from Kifaru, the Maridadi 1 well (drilled in 1985) had downdip oil indications close to the stratigraphic level of the Kifaru Reef.

The play characteristics of the Kifaru Prospects are considered to be very favourable, with predicted good mature mixed Eocene oil / gas source rocks below and adjacent to the Prospect and good predicted reservoir and seal characteristics.

### **Tembo Prospect**

The Tembo Prospect has been mapped in 3D as an Eocene sands play in a major tilted fault block trap. Mapped closure is approximately 30 sq km.

Timing of trap formation, migration, reservoir and seal all favour the Tembo Prospect. The Kipini Sandstone is the primary objective, with secondary objectives deeper in the section.

## **NAMIBIA**

### **NAMIBIA OFFSHORE REGIONAL ACTIVITY**

#### **Drilling Activity**

Brazil's HRT in late March commenced drilling its Wingat Prospect in EL 023. Wingat is on-trend to part of Pancontinental's EL 0037 licence area.

Following Wingat, HRT is planning a second well, Murombe 1 on another prospect in the same area. A third well will then follow elsewhere offshore Namibia – See Figure 6 below.

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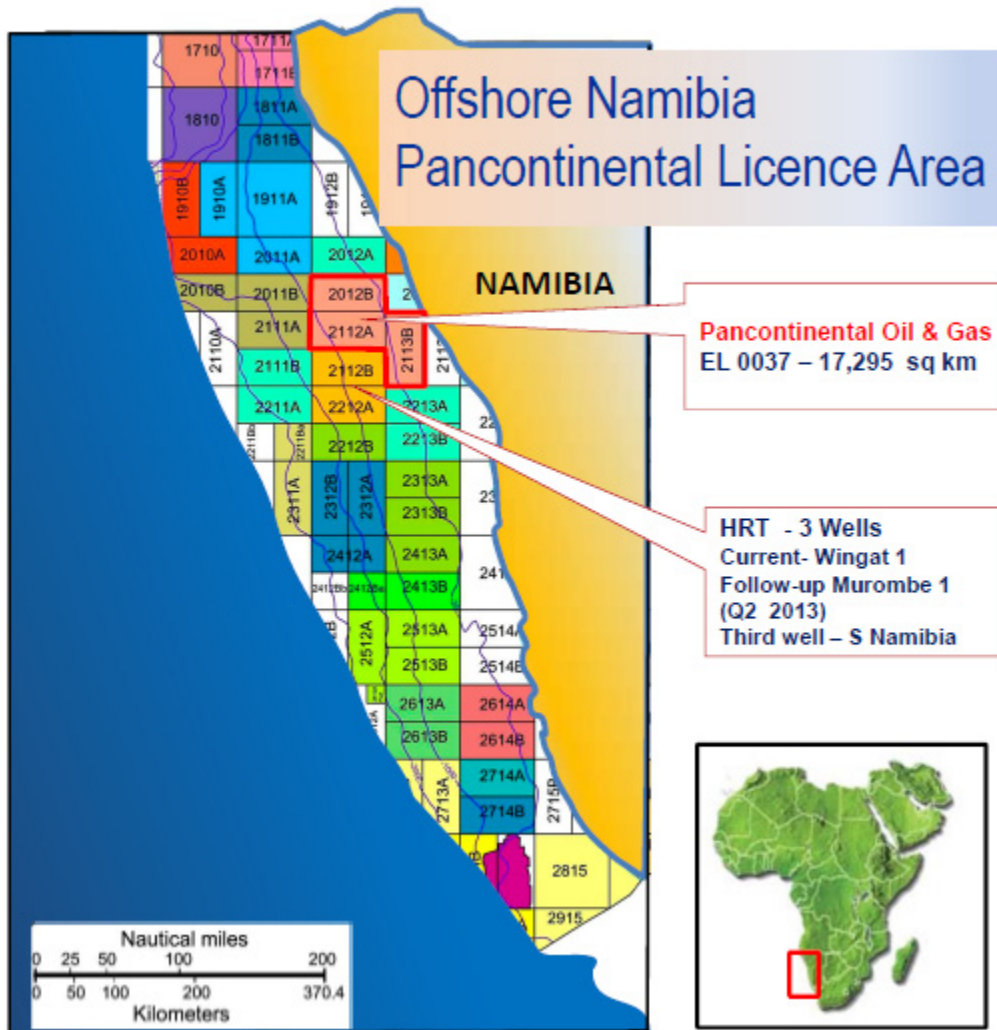


Figure 6- Map of Pancontinental EL 0037 Licence Area

**NAMIBIA OFFSHORE EL 0037**

*Pancontinental Oil & Gas NL – 95%, Operator*

Petroleum Exploration Licence No. 0037 (“EL 0037”) covers approximately 17,295 sq km in the Walvis Basin offshore northern Namibia. Pancontinental operates the Licence and holds a 95% interest.

**Prospectivity offshore Namibia**

Offshore Namibia is attracting significant international interest as a prime emerging prospective oil and gas province in southwest Africa with the potential to hold very large oil and gas reserves, and is significantly under-explored.

The 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 and it lies on the West African continental margin adjacent to Angola, where there have also been major oil discoveries.

Pancontinental believes that its Namibian acreage is one of the few areas covering an oil generating “sweet spot” where oil prone source rocks are sufficiently buried to generate oil; similar to its four projects offshore Kenya.

Source rock “maturity” is the key component of oil exploration offshore Namibia. EL 0037 covers a deep trough area where the oil source rocks should be sufficiently deep and mature to generate oil.

Pancontinental is exploring ponded basin floor turbidites, slope fans and channels seen on existing 2D seismic. These targets are associated with the restricted graben trough that is interpreted to hold the rich and mature oil source rocks seen in regional wells.

### EL 0037 Exploration

EL 0037 covers an extensive part of an “Inner Graben”, a geological trough that Pancontinental believes to be the oil-generating “fairway” offshore Northern Namibia.

Pancontinental has mapped a number of ponded turbidite, slope turbidite, basin floor turbidite fans and channels forming large “leads” within the Inner Graben in EL 0037.

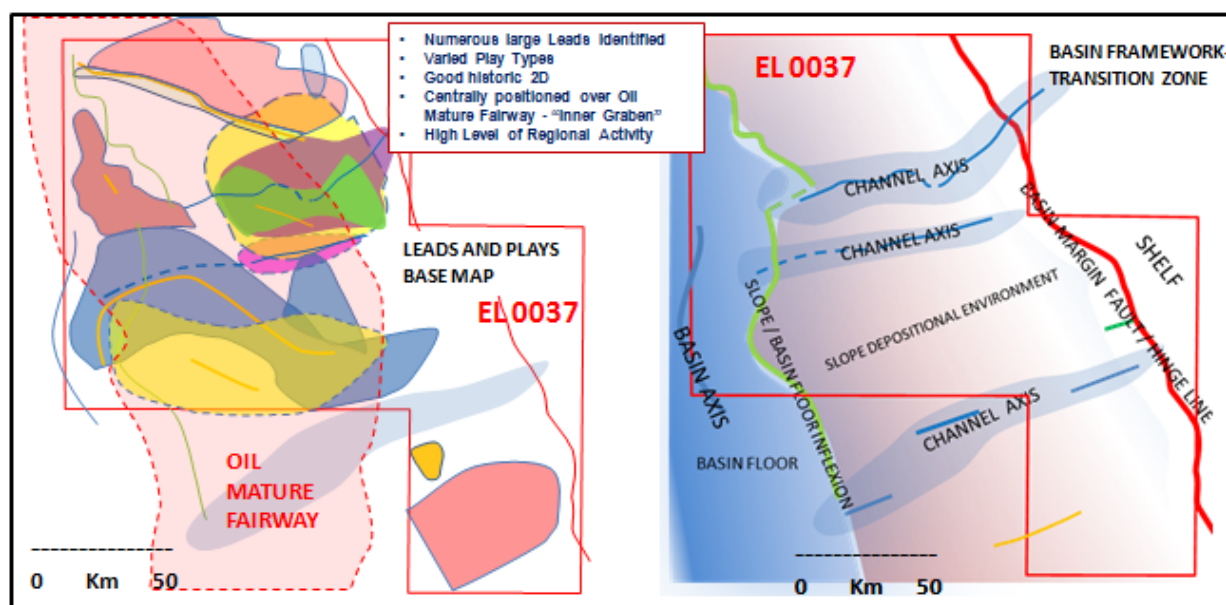


Figure 7: Namibia EL 0037 – Leads and Plays Base Map

A number of the leads exceed several hundred square kilometers based on current mapping, and detailed mapping will define the full extent of the structural and stratigraphic closures and potential oil-bearing traps.

### **Farmout Activity**

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

The EL0037 JV is seeking a farminee for drilling.

Pancontinental's 95% interest (increased from 85%) in EL 0037 sees it well placed amongst some major players offshore Namibia.

### **Forward Work Programme**

Pancontinental has commenced gathering data over the licence area and will remap existing seismic and map prospects and leads for further work.

It is intended that 2D and 3D seismic data will be acquired over several prospects and drilling will be considered on the best of these.

## **AUSTRALIA**

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

*Pancontinental Oil & Gas NL – 11.11%*

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.

### **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.

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## **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 due to the absence of success in extending Joint Venture access over all of the Baniyas Prospect, it was decided to consider selling or farming out 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.

During the quarter the Joint Venture considered a further review aimed at outlining possible onshore leads and prospects in EP 110.

## **Corporate**

### **Cash Position**

As at 31 March 2013, Pancontinental's cash position was \$35.3 million, which is expected to enable the Company to fund the currently planned drilling programmes for the next 12-18 months.

The major items of expenditure during the quarter were funding the 3D seismic programme carried out over Kenya blocks L10A and L10B as well as the acquisition of a further interest in Namibia EL0037.

### **New Ventures**

Pancontinental continues to examine a number of new exploration and acquisition opportunities in Africa with the aim of systematically and cost effectively growing the Company's significant African oil and gas portfolio.

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## Notes

### **\*L8 Section**

Pancontinental's 15% interest through Mbawa drilling was "free-carried" under farmout to Tullow Oil plc up to a "cap" of US\$ 9 million (as reduced by other exploration expenditure). After the first earning phase Tullow has an option to earn a further 5% (thereby reducing Pancontinental to 10%) by providing funding on Pancontinental's behalf to a cap of US\$ 6 million in any second well.

### **\*\*Table 1**

1. The recoverable hydrocarbon volume estimates prepared by FAR Limited and stated in the table above have been prepared in accordance with the definitions and guidelines set forth in the Petroleum Resources Management System, 2007 approved by the Society of Petroleum Engineers.
2. The prospective resource estimates have been estimated using probabilistic methods and are dependent upon a hydrocarbon discovery being made.
3. The Low Estimates, Best Estimates and High Estimates represent respectively that there is a 90%, 50% and 10% probability that the actual resource volume will be in excess of these amounts.
4. The estimates for unrisks prospective resources have not been adjusted for both an associated chance of discovery and a chance of development.
5. The Gross (100% working interest) prospective resource estimates include Government share of production applicable under the Production Sharing Contract.
6. The estimates for unrisks Prospective Resources for Kenya Block L6 are reported in oil or gas. There is insufficient geological and engineering data to make an assessment as to the likely ratio of oil or gas in a given discovery in Kenya Block L6, hence the estimates provided are for either all oil or all gas. The oil and gas estimates reported should not be added together.
7. Prospective resources means those quantities of petroleum which are estimated, as of a given date to be potentially recoverable from undiscovered accumulations by application of future development projects. Prospective resources have both an associated chance of discovery and a chance of development.
8. bcf means Billion Cubic Feet of gas at standard temperature and pressure conditions.
9. mmbbls means Million Standard barrels of oil or condensate.

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