

18 June 2018

# Major Turbidite Oil Fairways Mapped in PEL 87 Offshore Namibia

- Pancontinental has mapped extensive high-potential and oil-prone turbidite fan "fairways" in its PEL 87 Block, offshore Namibia.
- PEL 87 covers 10,947 km<sup>2</sup> and is highly prospective for oil. Pancontinental is the project Operator, with a 75% interest.
- Oil generating source rocks are evident from modern well control.
- Individual traps may cover 100's of km<sup>2</sup>, with geology and oil volume potential similar to large on-trend oil fields offshore West Africa.
- Industry interest is gaining momentum in the high-potential oil play developing offshore Namibia.

Commenting on exploration progress in PEL 87, Pancontinental CEO John Begg said:

"I am very pleased to report that early mapping in our new PEL 87 project shows a variety of exciting, large exploration fairways each with the clear potential for multiple traps holding very large volumes of oil.

One anticlinal structure may have closure greater than 600 km<sup>2</sup>. Individual Cretaceous submarine fan bodies may be more than 20 km across, similar to large turbidite oil discoveries further along the West African Margin. Importantly, the fairways in PEL 87 are very closely associated with mature oil source rocks.

The recent entry of ExxonMobil, Total and others attests that Offshore Namibia has the rare untapped potential for large, commercial oil discoveries in moderate water depths and in a very encouraging country environment.

Pancontinental is an early mover, rewarded with material positions in two prime blocks, the latest being an Operating 75% position in PEL 87, and cost exposure well within our capabilities.

The new Licence complements our existing strong position in PEL 37 to the north where we will be participating, fully funded, in the exciting Cormorant-1 well in September".

#### **PEL 87**

The PEL 87 licence was awarded to Pancontinental Oil & Gas NL ("Pancontinental") and local partners by the Ministry of Mines and Energy of Namibia in December 2017. Interests in PEL 87 are:

Pancontinental Orange Pty Ltd\* Custos Investments (Pty) Ltd National Petroleum Corporation of Namibia (Namcor) \*A wholly owned subsidiary of Pancontinental Oil & Gas NL

75% (Operator) 15% 10% PEL 87 covers a very large area of 10,947  $\rm km^2$  in water depths from 500m to 3,000m in the Orange Basin, offshore southern Namibia.

The Orange Basin and its northern equivalent the Walvis Basin, where Pancontinental's PEL 37 is located, have been only lightly explored. Modern seismic and drilling are now yielding very encouraging indicators for oil exploration.

In both Basins it was not until 2012 and 2014 that two wells conclusively proved the presence of high quality, Early Cretaceous oil source rocks. The oil "kitchen areas" now closely match the distribution of previously recorded oil seeps.

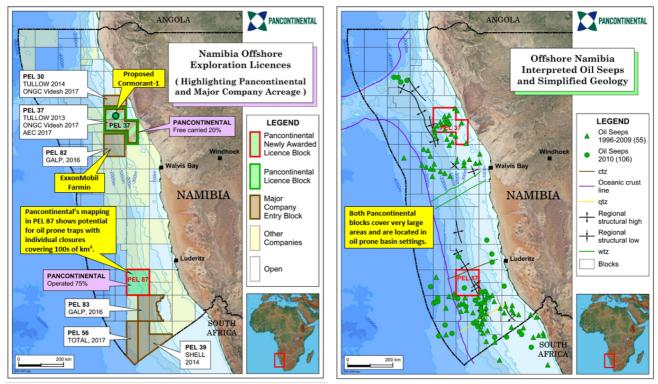


Figure 1. Location of Pancontinental Blocks relative to Major Company activity and oil seeps Offshore Namibia.

## **PEL 87 Prospectivity**

PEL 87 is highly prospective for oil, with proven high quality mature oil source rocks recovered by drilling and the potential for very large oil traps seen on seismic.

Pancontinental has matched high quality Early Cretaceous source rocks in Moosehead-1 (2014) to a widespread seismic package of oil-mature source rocks. These shaly rocks, deposited in a deep-water restricted basin, are high-quality and oil-prone, with Total Organic Carbon (TOC) content up to 6% and Hydrogen Index (HI) values commonly over 600. Pancontinental interprets them to be oil-generating in much of PEL 87.

Moosehead-1 tested an invalid play in the extreme south of PEL 87. Targeting an interpreted anticline, it instead drilled an old buried volcano that became extinct prior to a rise in sea level and deposition of the Early Cretaceous oil source rocks. However geochemical and thermal data from Moosehead-1 show that the source rocks are fully mature to generate oil within and adjacent to PEL 87.

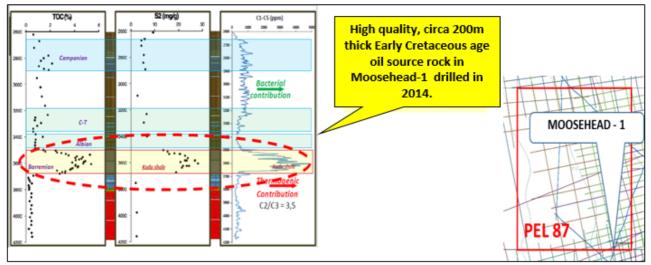


Figure 2. High Quality oil source rocks in Moosehead-1 are Oil Mature in PEL 87.

High-capacity potential oil traps or Leads, such as large turbidite fan bodies, have been identified within extensive Play Fairways across PEL 87. A number of mapped Leads immediately overlie the oil-mature source rocks.

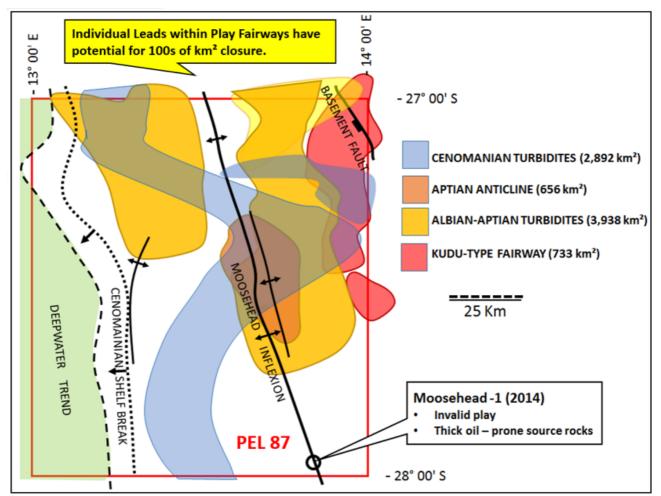


Figure 3. A variety of Major Exploration Play Fairways have been mapped across the 10,947 km<sup>2</sup> Block.

Large scale turbidite Leads are seen in several Fairways at several geological levels. Some of the Fairways cover over 2,500 km<sup>2</sup>. Major Leads within the Fairways are mapped directly above, or rest directly on, the interpreted mature oil source rocks.

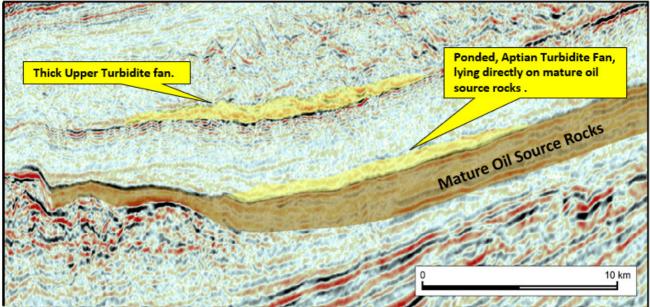


Figure 4. Example of a Ponded Turbidite Fan Lead resting directly on fully mature oil source rocks and an example of a shallower Upper Turbidite Play fan.

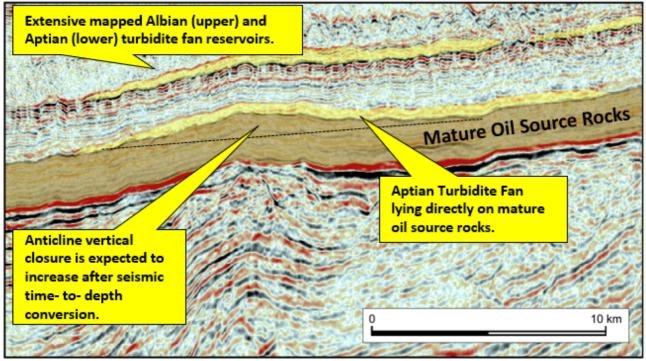


Figure 5. Example of a Large Anticline Structure with multiple reservoir targets indicated to cover over 600 km<sup>2</sup>.

## **Ongoing Work in PEL 87**

Pancontinental has commenced an extensive mapping programme using existing 2D seismic data. This work will mature existing Leads into individual Prospects. From work to date, Prospects are expected to be very large and oil prone. New 3D and 2D seismic is then planned over the major Leads and Prospects and the best targets will be identified for drilling in due course.

The Company's 75% equity provides flexibility for farmout activity such as 3D seismic and drilling, while still retaining a material interest. This is consistent with the Company's proven record in drilling high-potential plays offshore Africa such as the upcoming 2018 Cormorant well in PEL 37.

Pancontinental will report further as ongoing technical work and commercial activity proceeds.

#### Drilling in Pancontinental's PEL 37 (Walvis Basin)

PEL 87 exploration adds to Pancontinental's activities in PEL 37 further to the north in the Walvis Basin offshore Namibia, a project it generated in 2011.

Planned for September 2018 in PEL 37, the Cormorant-1 well will test one of a series of large, Early Cretaceous submarine "fans" mapped on 3D seismic with interpreted access to the northern, Walvis Basin oil kitchen. Good quality oil prone source rocks in the Walvis Basin were proven by the Wingat-1 well, drilled just south of the block in 2012. Once again consistent with extensive oil seep data.

PEL 37 is operated by Tullow Namibia Limited (a subsidiary of Tullow Oil plc) following a farmin to Pancontinental in 2013. More recently, ONGC Videsh of India and Africa Energy Corp ("AEC"), a subsidiary of Lundin Group, have invested in the project.

Pancontinental, with an effective 20% interest, will participate in drilling the Cormorant Prospect in PEL 37 in September 2018 under a farmin "carry" by Tullow Oil.

In September 2017, also in PEL 37, Pancontinental reached agreement with AEC for payment of US\$7.7 million to Pancontinental in two stages in return for AEC taking a 33.33% shareholding in the Pancontinental subsidiary that holds a 30% interest in PEL 37. This means that Pancontinental and AEC have effective 20% and 10% carried interests respectively in PEL 37, and the Cormorant-1 well.

The age and type of the Cormorant trap in PEL 37 is similar to those in PEL 87. It will however be accessing a separate oil source kitchen and provenance (or sand source) for the large, submarine fan sand reservoir targets.

For and on behalf of **Pancontinental Oil & Gas NL** 

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