

5 July 2017

# First Well in Sacramento Gas Basin Drilling Program planned for late July

- Drilling on Dempsey-1, the first well in the Bombora portfolio, is scheduled to commence in late July with all permits to drill in place.
- Pancontinental shareholder approval is being sought to issue shares as part of the acquisition of Bombora Natural Energy Pty Ltd at a General Meeting on July 10.
- Bombora estimates unrisked, Best Estimate recoverable Prospective Resources net to its 10% interest in the Dempsey project to be:

Net Prospective Gas Resource	Best Estimate
Pancontinental/Bombora	77 Bcf
(10% interest)*	

• Bombora, with its partners, is advanced in securing leases over additional large prospects on trend to Dempsey, with the potential for these to be significantly revalued by any success in Dempsey-1.

#### \*Cautionary Statement:

The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of petroleum.

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Pancontinental Oil and Gas NL (ASX: PCL) ("Pancontinental"), is pleased to provide an update on the Dempsey Gas Project, one of the projects it is acquiring through the acquisition of Bombora Natural Energy Pty Ltd ("Bombora"), subject to shareholder approval at a General Meeting on July 10, .

#### **Dempsey-1 Drilling**

Dempsey-1 is planned as a high-impact well in the Sacramento Gas Basin in California. The well will drill shallow targets in an existing gas field before drilling to 3,300m through larger, stacked conventional sandstone targets in a robust structure defined by 3D seismic.

The Dempsey asset is held within a number of leases from owners of the sub surface rights, and requiring the payment of annual land rentals and royalties on any hydrocarbons produced. Such leases are the standard means of accessing hydrocarbon exploration and production assets in the USA. As part of the farmin Bombora, once it has fully earned its interest, will become a part owner of a producing gas plant owned by the Sacgasco (ASX: SGC) operated joint venture that would be utilised to fast track development of any gas reservoirs proved up by Dempsey-1.

Dempsey 1 drilling is scheduled to commence in late July. Permits for the drilling are in place and preparation of the drilling site has commenced.

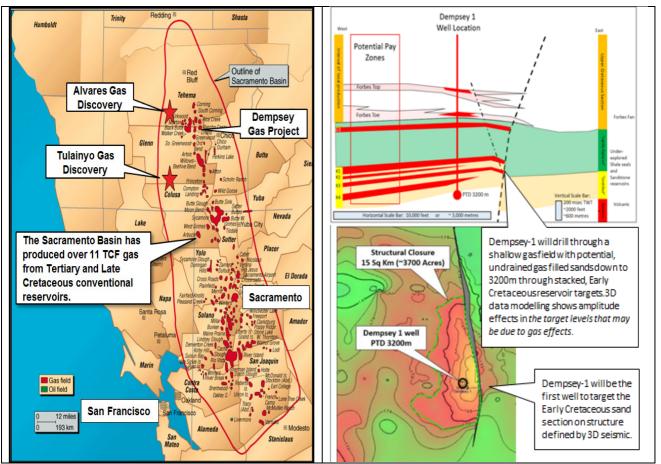


Figure 1 Location of Pancontinental/Bombora Sacramento Gas Basin Projects

Figure 2 X section and Map of the Dempsey Gas Prospect

#### **Dempsey Recoverable Prospective Gas Resource Estimates**

Bombora has made an internal assessment of the potential recoverable gas resources for the Dempsey Gas Project ("Project") in the Sacramento Gas Basin, California.

Prospective recoverable gas resource estimates, assessed at 4 September 2014 and reviewed on 5 January 2017, have been calculated by Bombora on a deterministic basis for the gross resource potential and Bombora's net earning interest of 10% in the project. The net interest as required by SPE PRMS standards for prospective resource estimation is also net of applicable royalties and lease ownership percentages. Royalties range from 16% to 24%, averaging approximately 20% across the project.

The prospective resource estimates are further based on the unrisked, cumulative gas fill of each potential stacked reservoir within closure. Seven target reservoirs are mapped beginning with two small (1-3 Bcf gross unrisked Best Estimate recoverable Prospective Resource) seismic amplitude defined, extension of the shallow producing Late Cretaceous age Forbes Sandstone reservoir system. The reservoir targets then extend down through a series of more broadly distributed older Cretaceous sandstones to a depth of approximately 3,200m).

Individual, unrisked Best Estimate Prospective Resources for these primary targets range from 93 bcf to 282 Bcf of recoverable gas\*. Should all the stacked reservoirs be full of gas, the cumulative unrisked recoverable Prospective Resources within the prospect are estimated at:

<b>Recoverable Prospective Resource</b>	
(Gross Best Estimate)	768 Bcf*
Recoverable Prospective Resource	
Pancontinental/Bombora	77 Def
(Net Best Estimate @10% earned interest)	77 Bcf

<sup>\*</sup> These estimates include the net effect of applicable royalties.

#### \*Cautionary Statement:

The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of petroleum.

#### **Background Information to Resource Estimations**

The Dempsey Prospect is located in the central, Northern Sacramento Gas Basin in an area of producing gas fields connected to the California gas network (Figure 1).

Dempsey is the first of several projects planned to appraise existing gas discoveries that Pancontinental is acquiring through the acquisition of Bombora.

An existing gas plant owned by the Dempsey Joint Venture, through which Sacgasco (the Dempsey project operator) is producing and selling gas, could be used to fast-track the development of any gas reserves proved by Dempsey-1.

California consumes on average 7 Bcf of gas per day, peaking up to 11 Bcf per day, and it imports some 90% of these requirements. Gas prices routinely trade at a premium to the Henry Hub domestic benchmark. The current gas price for Dempsey area gas is around US\$ 3.20 per Mcf (circa A\$4.20/Mcf).

The unit cost of drilling and development in the Sacramento Gas Basin is very low by international standards, providing a healthy environment for commercialising new gas resources. There have been over 11 Tcf of gas produced from shallow reservoirs in the Sacramento Gas Basin and production is extensively connected into California's vast domestic gas market.

Bombora interprets that the gas charge into the producing shallow reservoirs has been concentrated via migration into the underlying Dempsey structure. It is this large poorly explored underlying structure that Dempsey- 1 will test.

The Dempsey structure is part of a regional high trend that Bombora interprets to be located in a favourable "first out of the Basin" position for hydrocarbon charge from mature source rocks in a kitchen area to the west.

The Dempsey structure is mapped on good quality 3D seismic data, regional 2D seismic and tied to well control.

Seismic interpretation shows a robust, 3-way dip, fault bounded closure up to  $15 \text{km}^2$  (3,700 acres) in area, with conventional sandstone reservoir targets mapped at seven stacked levels. A number of the reservoir targets show amplitude anomalies that may represent the presence of gas. Individual closures vary from 80 acres to 3,700 acres.

Estimates of reservoir quality and thickness are based on in-field well control at the two shallower, potential gas field extension levels. Regional data from 16 wells have been used in estimating the prospective resource in the older, Early Cretaceous age reservoirs.

The principal technical risk for the larger, deeper reservoir targets is considered by Bombora to be reservoir quality.

Bombora believes that the chance of encountering gas at the shallow levels is very high with some risk that the reservoirs are not separated from existing producers and have been depleted. At the deeper target levels Bombora assesses the chance of discovering gas at up to 40%, which is high by industry standards for exploration targets.

Due to the strong local gas market and ready access to producing infrastructure, if gas resources in the range estimated are discovered then a commercial development at Dempsey is virtually certain.

## **Working Interests**

Pancontinental proposes to acquire Bombora and its subsidiaries in an all-scrip transaction, and is proceeding to seek Pancontinental shareholder approval to a number of resolutions relevant to the transaction at a General Meeting on 10 July 2017. A Notice of Meeting providing details of the transaction was sent to shareholders on 13 June, 2017.

Bombora has the right to acquire a 10% interest in the Project through a farmin agreement with Sacgasco Limited (ASX: SGC). Under the farmin Bombora has

already advanced A\$450,000 toward the cost of the well and is required to provide another A\$550,000 by 17 July, 2017 to fully earn its interest.

Bombora will also participate in a large Area of Mutual Interest (AMI) covering the mid-basin high trend on which the Dempsey structure is located. Bombora has already contributed a further approximately A\$200,000 toward land leasing costs within the AMI area. A range of follow-up gas prone prospects with similar potential to Dempsey have already been identified and leasing of these follow-up plays is advanced.

Subject to completion of announced farmins by Bombora and AIM listed Empyrean Energy equities in the Dempsey project will be:

Sacgasco Limited (ASX: SGC) 50% (operator)

Pancontinental /Bombora (ASX: PCL) 10% Empyrean (AIM: EME) 30% Xstate Resources Limited (ASCX: XST) 10%

Barry Rushworth, CEO of Pancontinental said:

"Dempsey-1 is an exciting drilling opportunity for Pancontinental, with significant potential for near term gas reserves and commercial production.

Via Bombora, Pancontinental has the opportunity to acquire a portfolio of projects in the Sacramento Gas Basin that could all be upwardly revalued by success in Dempsey-1.

Our Bombora strategy is consistent with our historic strategy of acquiring overlooked prospectivity and the potential for adding significant value with the drill bit.

In all of the projects we are acquiring in the Sacramento Gas Basin, including Dempsey, we will be appraising earlier gas discoveries, and this adds significantly to the chance of success.

Our startup plans are to deliver at least two high impact wells on large gas prospects in California in 2017, starting with Dempsey-1".

## QRRE Person (Qualified Petroleum Resources Evaluator)

The information in this release relating to the Dempsey Gas Project has been compiled by Mr John Begg, Managing Director of Bombora Natural Energy Pty Ltd. Mr Begg has the relevant degree in geology and has been practicing petroleum geology for more than 30 years. Mr Begg has consented in writing to the inclusion of the information stated in the form and context in which it appears.

Mr Begg is not aware of any new information or data that would materially affect the information relating to the Dempsey Gas Project that is included in this announcement. All material assumptions and technical parameters underpinning the estimates in this announcement continue to apply and have not materially changed up to the date of this announcement.

For and on behalf of

**Pancontinental Oil & Gas NL** 

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**Barry Rushworth** 

**CEO and Executive Director** 

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