

Major oil & gas resource confirmed in Dorado

6 June 2019



Highlights

- **Oil and condensate rich gas in Dorado successfully appraised through the Dorado-2 well**
- **A major resource has now been confirmed across multiple reservoir intervals**
- **The result increases confidence to progress to development, particularly of the Caley oil resource**

Carnarvon Petroleum Limited (“Carnarvon”) (ASX:CVN) is pleased to announce that the wireline logging of the Dorado-2 well has successfully confirmed pre-drill expectations of a major oil and gas resource at Dorado.

In the Caley reservoir, being the primary target, the Dorado-2 well intersected an oil-water contact as planned, which will enable refinement of the range of the recoverable oil resource. High-quality oil was extracted from the reservoir and excellent reservoir properties are comparable to those discovered in Dorado-1.

The Caley formation results provide important definition of the required facilities for developing this oil field, providing important confidence around progressing to the first phase of development.

In the Baxter reservoir, a secondary target, condensate rich gas was extracted from the well as expected. The wireline logging also confirmed that a hydrocarbon column was encountered with no gas-water contact identified. Pressure data indicates the column likely extends for several hundred metres and may also encompass the Roc South structure at this level.

The Crespin reservoir was water-wet as anticipated, with valuable data being collected that will assist in refining the size of the resource encountered in Dorado-1.

Samples from the Milne reservoir were recorded as oil bearing on the rig. The very light nature of this oil may result in this hydrocarbon phasing being re-classified as a highly condensate rich gas. No water contact was encountered in the Milne section in the Dorado-2 well.

Importantly, the well encountered high quality and productive reservoirs in each target. Initial indications (pending confirmation from laboratory analysis) are that fluid compositions are similar to the light oils and gases that were sampled in Dorado-1, where high condensate yields range from 70 to 245 barrels per million standard cubic feet.

Carnarvon has commenced preparing updated volumetric estimates based on the results of Dorado-2 and will release them as soon as this process has been completed.

Dorado resides in WA-437-P in which Carnarvon holds a 20% interest.

Managing Director Adrian Cook said “The Dorado-2 well was very important to Carnarvon because of its potential to transition the Company into a significant producer in the future. This highly successful result makes this a very tangible reality.

Dorado has been proven to be a world class resource, located in an ideal jurisdiction and operated by a quality partner. The Joint Venture can now confidently continue with its plans for a fast-tracked Caley oil development and a more substantial full field development, which is expected to incorporate the Roc discovery, on a staged basis.

Overall, I'm very pleased with the result from this well and incredibly excited for the future of our Company."

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Forward Looking Statements

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Technical Appendix

Caley Member

Interpretation of wireline logging and fluid sampling has confirmed an oil-water contact is present in the Dorado-2 well as planned. The pressure data indicates a continuous oil column between Dorado-1 and Dorado-2.

The reservoir sands intercepted in the main Caley reservoir in Dorado-2 are of a similar high quality compared to Dorado-1. Within the Caley Member, approximately 85 metres of net reservoir was intersected in Dorado-2, with an associated net oil pay of approximately 40 metres taking into account the oil-water contact, with average porosity of around 17%.

Oil was extracted from a number of depths in the well confirming a light crude similar to that extracted in Dorado-1. The mobility of the fluid extracted was also very similar to that of Dorado-1 and confirms high permeabilities in the reservoir, indicating the field will comfortably flow at commercial rates.

An additional 11 metres of net hydrocarbon pay was encountered in the Upper Caley sands. In this section hydrocarbon fluids were extracted and sampled as light oil, however comparison of this fluid to PVT analysis of a similar section of reservoir in Dorado-1 could indicate a condensate-rich gas overlies the main oil field.

Water was also sampled in this reservoir with an oil-water contact established using wireline interpretation, pressure analysis and fluid sampling.

Baxter Member

Interpretations from the wireline logging tools indicate the Baxter reservoir encountered a continuous hydrocarbon column between the Dorado-1 and Dorado-2 wells. Two samples were extracted from the well that were identified on the rig as condensate rich gas, with the hydrocarbons becoming heavier deeper in the well, indicating the potential for a richer condensate gas than encountered in Dorado-1 or possibly an oil leg.

No water was encountered in the Baxter Member in Dorado-2 as anticipated.

The pressure data is in a similar high-pressure regime as encountered in Dorado-1, indicating that the Baxter reservoir is continuous between the two wells.

Mapping of the seismic data suggests the Baxter could extend as a continuous hydrocarbon column incorporating the Roc South structure at this level.

Interpretation from the wireline logging data indicates the Dorado-2 well intersected around 13 metres of net pay with an average porosity of 14%.

Crespin Member

No hydrocarbons were encountered in the Crespin member as anticipated.

Pressure data confirmed a water gradient in the Crespin in the Dorado-2 well that is similar to that inferred from the Dorado-1 well. The additional data will assist in better defining a contact in this reservoir section.

Interpretation from the wireline logging data indicates the Dorado-2 well intersected around 44 metres of net reservoir with an average porosity of 11%.

Milne Member

Data interpreted from the wireline logging tools have indicated that hydrocarbons were intersected in the Milne Member in the Dorado-2 well. Two samples of fluid were extracted within the Milne Member and identified on the rig as very light oil with high gas content. Further analysis needs to be undertaken and may result in this fluid being reclassified as a very condensate-rich gas.

Water was not interpreted to have been intersected in the Milne reservoir in the Dorado-2 well.

Interpretation from the wireline logging data indicates the Dorado-2 well intersected around 19 metres of net hydrocarbon bearing reservoir in the Milne Member with an average porosity of 10%.

Figure 1: Map of WA-437-P showing the Dorado field

