

Buffalo project update

22 September 2021



Highlights:

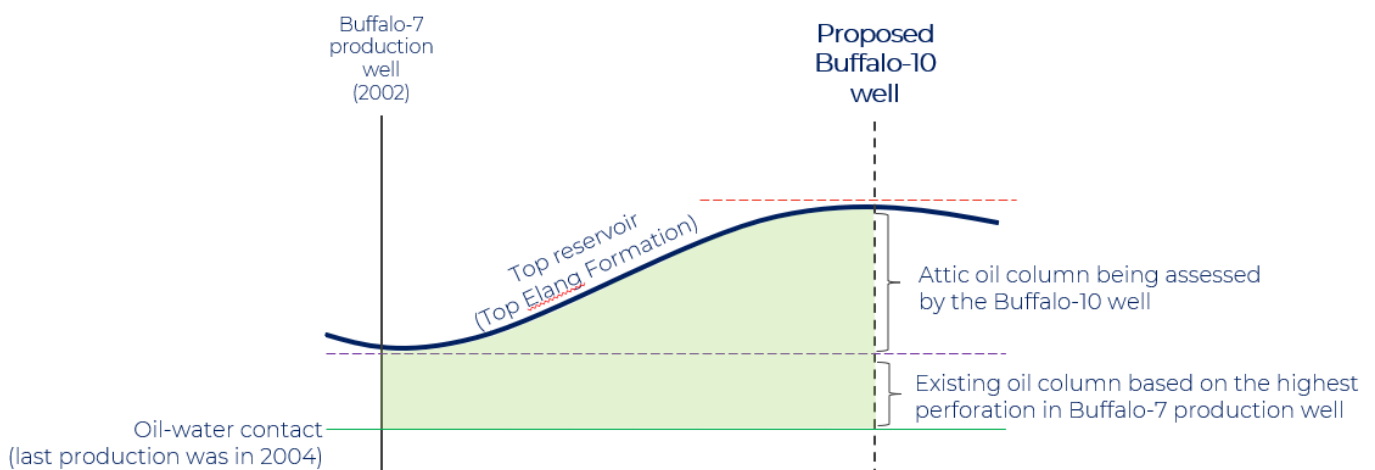
- Commencement of the Buffalo-10 well is on schedule to spud in early November
- Mid case recoverable volume estimate is 31 million barrels (gross, 2C contingent resource)
- Strong likelihood Buffalo-10 will confirm a sanctionable development project based on the minimum economic field size
- Buffalo-10 to be retained in the success case as first production well in development program
- Planning work is in progress to compress the time to first production

Carnarvon Petroleum Limited ("Carnarvon") (ASX:CVN) is pleased to provide the following update on the Buffalo project.

The Buffalo project involves the redevelopment of the Buffalo oil field in the Timor Sea. The field resides in only 30 metres of water with a reservoir depth between 3,200 and 3,300 meters below the sea bed.

The previous field proved the existence of very high deliverability reservoir containing high quality light oil that is expected to sell at a premium to Brent in today's market.

Carnarvon, as the operator of the project, is preparing to drill a well that will penetrate the existing oil column remaining (because the field was still producing when it was shut-in in 2004), and assess the extent of the revised mapped attic oil column as illustrated in the schematic diagram below:



Carnarvon's mid case recoverable volume estimate is 31 million barrels (gross, 2C contingent resource). With the minimum economic field size estimated to be significantly lower than the mid case estimate, there is a strong likelihood the Buffalo-10 well will confirm an economic project. Accordingly, Carnarvon's drilling plans provide for the Buffalo-10 well to be retained as the first production well in the redevelopment program.

For the above reasons, Carnarvon is also working with its project partner, Advance Energy Plc, on plans to compress the timeline to first production once the Buffalo-10 well confirms the expected recoverable oil resource. These plans include engaging with industry for supply and installation of suitable equipment to produce the oil.

As announced on 1 September 2021, the VALARIS JU-107 drilling rig has been contracted to drill the Buffalo-10 well. The rig will move to the Buffalo drilling site once it has completed its current operations which are around 300 kilometres from the Buffalo location. Timing wise, the rig is expected to commence Buffalo drilling operations in early November, namely in around 6 weeks' time. A site survey of the anticipated surface location has been undertaken, with confirmation that the location is suitable for the jack-up drilling rig.



Image of the VALARIS JU-107 drilling rig

Aside from the drilling rig, a number of ancillary contracts have now been signed with support vessels, helicopters, drilling service providers and shore base and logistics providers. Equipment is being mobilised in preparation for drilling to commence within a few weeks.

While the majority of support services for the drilling have been confirmed, the final well timing will be subject to the release of the rig from the previous operator, and securing the last remaining services and equipment, and receiving the necessary joint venture and regulatory approvals.

Carnarvon Managing Director and CEO, Mr Adrian Cook, said:

“Our preparations for drilling the Buffalo-10 well are in good shape and we’re looking forward to commencing drilling relatively soon.

We continue to work well with and enjoy the support of our joint venture partner, Advance Energy Plc, who have contributed US\$20 million towards the cost of the Buffalo-10 well and now hold a 50% interest in the project.

Once drilling commences, we expect to reach the target in around 35 days and, given our modelled economics, this well has the potential to be value transforming for Carnarvon.”

Approved by:



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Resource Information

The estimates of contingent resources included in this report have been prepared in accordance with the definitions and guidelines set forth in the SPE-PRMS. Refer to Carnarvon Petroleum's ASX announcement on 28 August 2017 for more information

A combination of deterministic and probabilistic methods were used to prepare the estimates of these contingent resources.

The resource estimates outlined in this report were compiled by the Company's Chief Operating Officer, Mr Philip Huizenga, who is a full-time employee of the Company. Mr Huizenga has over 25 years' experience in petroleum exploration and engineering. Mr Huizenga holds a Bachelor Degree in Engineering and a Masters Degree in Petroleum Engineering. Mr Huizenga is qualified in accordance with ASX Listing Rules and has consented to the form and context in which this statement appears.

Carnarvon is not aware of any new information or data that materially affects the information included in this announcement and that all material assumptions and technical parameters underpinning the estimates in this Presentation continue to apply and have not materially changed.

Cautionary Statement

This document may contain forward-looking information. Forward-looking information is generally identifiable by the terminology used, such as "expect", "believe", "estimate", "should", "anticipate" and "potential" or other similar wording. Forward-looking information in this document includes, but is not limited to, references to: well drilling programs and drilling plans, estimates of reserves and potentially recoverable resources, and information on future production and project start-ups. By their very nature, the forward-looking statements contained in this news release require Carnarvon and its management to make assumptions that may not materialize or that may not be accurate. The forward-looking information contained in this news release is subject to known and unknown risks and uncertainties and other factors, which could cause actual results, expectations, achievements or performance to differ materially, including without limitation: imprecision of reserve estimates and estimates of recoverable quantities of oil, changes in project schedules, operating and reservoir performance, the effects of weather and climate change, the results of exploration and development drilling and related activities, demand for oil and gas, commercial negotiations, other technical and economic factors or revisions and other factors, many of which are beyond the control of Carnarvon. Although Carnarvon believes that the expectations reflected in its forward-looking statements are reasonable, it can give no assurances that the expectations of any forward-looking statements will prove to be correct.

Carnarvon To Drill Bufallo-10 Well In Early November

by Bojan Lepic | Rigzone Staff | Thursday, September 23, 2021



Carnarvon Petroleum set to spud the Buffalo-10 well in the Timor Sea in early November.

Australian oil and gas company Carnarvon Petroleum has stated that it expects to spud the Buffalo-10 well in the Timor Sea in early November.

Carnarvon said that the well would penetrate the existing oil column using the remaining Valaris JU-107 jack-up drilling rig and, because the field was still producing when it was shut-in in 2004, assess the extent of the revised mapped attic oil column.

The Valaris JU-107 jack-up drilling rig will move to the Buffalo drilling site once it has completed its current operations which are around 185 miles from the Buffalo location.

According to the company, the previous field proved the existence of a very high deliverability reservoir containing high-quality light oil that is expected to sell at a premium to Brent in today's market. Carnarvon's mid-case recoverable volume estimate is 31 million barrels (gross, 2C contingent resource).

Carnarvon claimed that there was a strong likelihood the Buffalo-10 well would confirm an economic project. Accordingly, the company's drilling plans provide for the well to be retained as the first production well in the redevelopment program.

Along with its partner Advance Energy, Carnarvon is working on plans to compress the timeline to first production if the well confirms the expected recoverable oil resource. These plans include the supply and installation of suitable equipment to produce the oil.

In Advance's estimates, Buffalo-10 is considered to have an 85 percent probability of confirming a sanctionable development project based on the minimum economic field size.

"Timing-wise, the rig is expected to commence Buffalo drilling operations in early November, namely in around 6 weeks' time. A site survey of the anticipated surface location has been undertaken, with confirmation that the location is suitable for the jack-up drilling rig," the company said. Carnarvon also signed contracts for support vessels, helicopters, drilling service providers, and shore base and logistics providers.

It is worth noting that the final well timing will be subject to the release of the rig from the previous operator, and securing the last remaining services and equipment, and receiving regulatory approvals.

"Our preparations for drilling the Buffalo-10 well are in good shape and we're looking forward to commencing drilling relatively soon. We continue to work well with and enjoy the support of our joint venture partner, Advance Energy, who have contributed \$20 million towards the cost of the Buffalo-10 well and now hold a 50 percent interest in the project," Carnarvon Managing Director and CEO Adrian Cook said.

"Once drilling commences, we expect to reach the target in around 35 days and, given our modeled economics, this well has the potential to be value transforming for Carnarvon," he added.

The Buffalo project involves the redevelopment of the Buffalo oil field in the Timor Sea. The field sits in 100 feet of water with a reservoir depth between 10,000 and 12,000 feet below the seabed.

To remind, the Buffalo project was originally in Australian waters but in 2018 the Australian and Timor-Leste governments signed a maritime boundary agreement that changed the maritime boundary between the two countries, affecting the permit that contains the Buffalo project. The permit was split in two with the part containing the Buffalo field changing hands to East Timor jurisdiction.

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