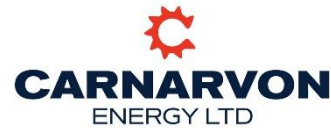


# Buffalo-10 Drilling Commenced

## 31 December 2021



- Drilling of the Buffalo-10 well has now commenced
- The top hole section has been drilled down to around 120 metres
- Current operations involve running and cementing the conductor prior to drilling the 17 ½" hole
- Buffalo-10 well aiming to confirm sufficient hydrocarbons to support an economic development

Carnarvon Energy Limited ("Carnarvon") (ASX:CVN) is pleased to announce that the Valaris JU-107 jack-up drilling rig has commenced operations at the Buffalo-10 well location.

### Progress

Since arriving at the Buffalo-10 well location, the rig has successfully concluded preparations for drilling and has drilled the top hole section following a slight delay caused by a tropical weather system. The current operation involves the installation and cementing of the Conductor which provides the structural foundation for the well.

### Forward Plan

Once the surface casing has been cemented in place, the rig will drill 17 ½" hole to a planned section depth of approximately 800 metres Measured Depth ("MD"), followed by setting the 13 ¾" casing. Following this, the well is planned to drill the 12 ¼" hole section to approximately 2,800 metres MD before setting the 9 ¾" casing.

No hydrocarbons are anticipated to be intersected in these drilling sections.

Approved by:

**Adrian Cook**

Managing Director  
Carnarvon Energy

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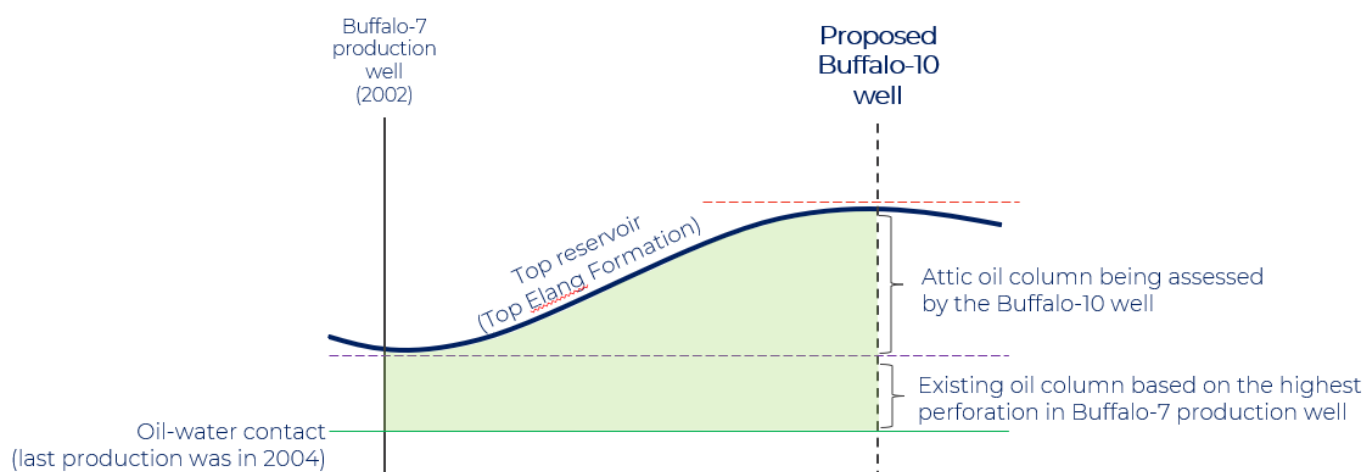
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## About Buffalo

The Buffalo project objective involves redeveloping 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 seabed.

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.

The Buffalo-10 well will penetrate the existing oil column (because the field was still producing when it was shut-in in 2004) to 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 working with its project partner, Advance Energy Plc, on plans to compress the timeline to first production once the Buffalo-10 well confirms a commercial oil resource. These plans include engaging with local industry for the supply and installation of suitable equipment to produce the oil.

## Resource Information

The estimates of contingent resources included in this announcement have been prepared in accordance with the definitions and guidelines set forth in the SPE-PRMS. Please refer to Carnarvon'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 announcement 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 the ASX Listing Rules and has consented to the form and context of this announcement.

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 announcement continue to apply and have not materially changed.

## Cautionary Statement

This announcement 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 announcement 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-up. By their very nature, the forward-looking statements contained in this announcement 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 announcement 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.

31 December 2021

**Advance Energy plc  
("Advance Energy" or the "Company")**

**Buffalo-10 Well Drilling Commenced**

Advance Energy ([AIM:ADV](#)), the energy company seeking growth through acquisition or farm-in to non-operated interests in discovered upstream projects, is pleased to announce that the Valaris JU-107 jack-up drilling rig has commenced operations at the Buffalo-10 well location, offshore Timor-Leste.

The Operator, Carnarvon Petroleum Timor, Lda., has advised that the drilling rig has successfully concluded the ready to operate process and has drilled the surface hole and installed the surface casing. The well is currently drilling ahead in the 17 ½" hole section at a depth of approximately 120 metres.

The rig will drill the 17 ½" hole to the planned section depth of approximately 800 metres followed by setting of the 13 ⅜" casing. The 12 ¼" hole section will then be drilled to approximately 2,800 metres before setting the 9 ⅝" casing.

No hydrocarbons are anticipated to be intersected in these first two sections of the well.

The Buffalo-10 well is being drilled offshore Timor-Leste within the TL- SO T19-14 Production Sharing Contract in a water depth of approximately 30 metres with a target depth of approximately 3,500 metres.

The well is being drilled to test for the presence of commercial quantities of high-quality light oil that is expected to lead to the early re-development of the Buffalo field.

**Leslie Peterkin, CEO of Advance Energy, commented:**

*"We are delighted to hear this progress from the Operator as we hit another operational milestone. The joint venture is working hard to conclude the drilling program in the coming weeks and remains confident that the Buffalo-10 well will be a geological and economic success. We look forward to providing further updates in due course."*

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**About the Buffalo Project**

The Buffalo Project objective involves redeveloping 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.

RISC Advisory certified the mid case recoverable volume in the Buffalo field to be 34 MMstb (gross, 2C contingent resource), and the primary objective of the Buffalo-10 well is to demonstrate the presence of a significant, previously undrilled attic oil accumulation and for this resource to be converted to 2P reserves.

Furthermore, the CPR developed by RISC in March 2021 has demonstrated that an economic development of the 1C resource of 16 MMstb would be viable down to an oil price of \$35. It is therefore considered that there is a strong likelihood that the Buffalo-10 well will confirm an economic development project, with RISC's CPR stating that: "RISC estimate the probability of development to be 86%."

For the above reasons, the Operator is working on plans to compress the timeline to first production once the Buffalo-10 well confirms a commercial oil resource. These plans include engaging with industry for supply and installation of suitable equipment to produce the oil.

For further information, please visit [www.advanceplc.com](http://www.advanceplc.com) and @advanceplc on Twitter

To register for Advance Energy's email alerts, please complete the following form: <https://www.advanceplc.com/media-centre/news/#alerts>

*The information contained within this announcement is deemed by the Company to constitute inside information as stipulated under the Market Abuse Regulation (EU) No. 596/2014 as it forms part of United Kingdom domestic law by virtue of the European Union (Withdrawal) Act 2018.*

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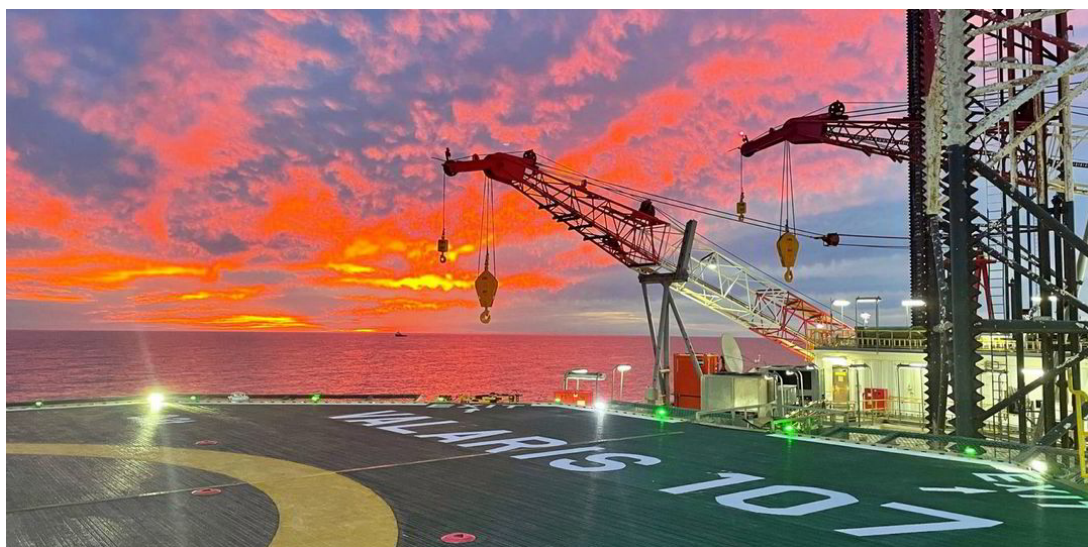
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## Drilling starts at Buffalo appraisal offshore Timor-Leste

New probe could spur a redevelopment of offshore oilfield that has been shut in since 2004

Upstream Online, 31 December 2021. By Josh Lewis



*New dawn: the Buffalo-10 well is being drilled by the jack-up Valaris 107 and could spur a redevelopment of the Buffalo oilfield offshore TimorLeste Photo: VALARIS*

Australia's Carnarvon Energy has commenced drilling an appraisal well at the Buffalo field, offshore Timor-Leste, that it is hoped will spur the redevelopment of the shut-in oilfield.

The operator confirmed Friday drilling had started on the Buffalo-10 appraisal well, using the jack-up Valaris JU-107 drilling rig.

The well is being drilled in a water depth of 30 metres and will be drilled to a total depth of about 3500 metres to test the presence of an attic oil accumulation that remains after the original Buffalo development was closed-in.

It is hoped, if successful, the appraisal well will help convert the best estimate certified resources of 34.3 million barrels of oil to proved plus probable reserves and lead to the early re-development of the Buffalo field.

Buffalo was originally discovered in 1996 by BHP, with output commencing in 1999 and reaching rates of up to 50,000 barrels per day, however production had fallen to about 4000 bpd by 2004 when the field was shut-in by then operator Nexen Petroleum, having produced roughly 20.5 million barrels of oil since start-up.

Carnarvon's re-development options for the field currently involve a wellhead platform connected to a floating production, storage and offloading vessel, or a mobile operating production unit connected to a floating storage and offloading vessel.

The option Carnarvon chooses, along with the potential number of production wells to be drilled, will be decided following the results of the Buffalo-10 well, as well as market pricing around the different development options at the time of the decision.

The Buffalo field lies within the TL-SO-T-19-14 production sharing contract, which Carnarvon operates in a 50:50 partnership with London-listed Advance Energy.