Carnarvon Energy Timor Sea Well Result 'Disappointing and Hugely Surprising'

Offshore Engineer, January 24, 2022  By OE Staff

Australian oil and gas company Carnarvon Energy said Monday its closely watched Buffalo-10 well in Timor Sea had failed to unearth commercial volumes of oil.

The company said that the wireline logging operations have been completed with the oil column deemed to be residual and uncommercial.

"The well will be left in a safe condition and the rig demobilized," the company said. The well was drilled with the Valaris JU-107 jack-up rig.

Carnarvon Energy Managing Director and CEO, Mr Adrian Cook, said: “The results from Buffalo-10 well are disappointing for the Carnarvon team and shareholders, but now our attention moves to the commencement of the high impact Pavo-1 and Apus-1 exploration wells within the next month in the Bedout basin."

The Buffalo-10 well was drilled offshore Timor-Leste in the TL-SO-T 19-14 PSC in which Carnarvon holds a 50% interest. The remaining 50 percent is held by Advance Energy.

Disappointing and hugely surprising

Leslie Peterkin, CEO of Advance Energy, said:"The results of B-10 are both disappointing and hugely surprising given the independently verified risk assessment which confirmed a highly likely commercial outcome from the well. Across the JV, we invested a significant amount of technical work into the project which underpinned our high degree of confidence that the well would unlock the significant value of the field.

"The post-well evaluation indicates that the well was drilled into the hanging wall of a fault, although uncertainty in seismic resolution also contributed to the reservoir being significantly deeper than expected at this location. It is not the case that this result means that all of the attic oil volumes certified by RISC have been negated. The Buffalo Joint Venture will conduct further technical analysis in the coming weeks to fully understand why the attic was not encountered as prognosed at the drilled location."

We believe it is likely that the JV will relinquish the Buffalo asset as neither company wishes to fund a second appraisal well in the field.

Looking ahead, Advance Energy remains funded for the immediate near-term and the team has been working on a pipeline of identified, attractive opportunities. We will now turn our full attention to bringing at least one of these to fruition this year. These are value accretive opportunities and include an opportunity with cash flow, which would be suitable for debt or vendor financing. Our immediate priority will be to significantly reduce costs while we assess the next steps for the growth of the Company."
The Buffalo field was discovered in 1996 by BHP and produced from 1999 to 2004, with the last well, Buffalo 9, drilled in 2002. In 2005 the lease on the FPSO ended, and coupled with declining production rates, increasing water cut, and decreasing gas availability for gas-lift, the field was abandoned. All wells were plugged and abandoned, and the infrastructure removed.

Carnarvon was awarded the WA-523-P permit, which included the previously developed Buffalo field, in May 2016 for an initial six-year term.

The Buffalo project was originally situated in Australian waters, but in 2018, the Australian and TimorLeste governments signed a maritime boundary agreement that changed the maritime boundary between the two countries, affecting the WA-523-P permit that contains the Buffalo project.

The WA-523-P exploration permit was split in two with a portion containing the Buffalo oil field changing from its Australian jurisdiction to being exclusively in the East Timor jurisdiction. The Buffalo field is located in Timor-Leste in the TL-SO-T 19-14 PSC.

The Buffalo-10 well was drilled in around 30 meters of water depth, to test for the presence of commercial quantities of hydrocarbons (oil) that would have ultimately resulted in a re-development of the field in case of success.

Seismic work conducted prior to drilling had led Carnarvon to estimate contingent resources in the Buffalo oil field of 31.1 million barrels (2C), with low estimates of 15.3 million barrels (1C) and high estimates of 47.8 million barrels (3C), and Carnarvon had said that there was a strong likelihood the Buffalo-10 well will confirm an economic project, however, this is now no longer the case.
Huge blow for oilfield redevelopment plan off Timor-Leste

Appraisal well at Carnarvon Energy's Buffalo oilfield disappoints as operator turns attention back to two giant exploration prospects offshore Australia

Upstream Online, 24 January 2022. By Josh Lewis

Plans for a giant oilfield redevelopment off the coast of Timor-Leste have taken a huge blow following the disappointing results of a newly drilled appraisal well.

Operator Carnarvon Energy revealed Monday that wireline logging operations had been completed at the Buffalo-10 well, with the previously announced discovered oil column determined to be residual and uncommercial.

It added that it would carry out work to leave the well "in a safe condition" before the jack-up rig Valaris 107 is demobilised.

Carnarvon had hoped that success at Buffalo-10 would spur a redevelopment of the oilfield which was shut-in by Nexen Petroleum in 2004.

The field 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 the time it was shut-in, having produced roughly 20.5 million barrels of oil since start-up.

Prior to drilling, Carnarvon had placed the mid-case recoverable volumes at Buffalo at 31 million barrels on a gross best estimate contingent resource basis, believing there was a "strong likelihood Buffalo-10 will confirm a sanctionable development project based on the minimum economic field size".

Upstream has contacted to Carnarvon for more details on what the drilling results at Buffalo-10 mean for its overall field redevelopment plans.

The field sits in Timor-Leste's exclusive waters, and is owned by Carnarvon and 50:50 partner Advance Energy.

With the results from the Buffalo-10 appraisal well proving to be disappointing, the operator indicated it would now turn its attention back to promising exploration prospects offshore Western Australia.

"The results from Buffalo-10 well are disappointing for the Carnarvon team and shareholders, but now our attention moves to the commencement of the high impact Pavo-1 and Apus-1 exploration wells within the next month in the Bedout basin," said Carnarvon managing director Adrian Cook.

The jack-up Noble Tom Prosser has been contracted to drill both wells, starting with Pavo-1 and followed immediately by Apus-1, with operator Santos expected to kick off drilling later this month.

The prospects lie near the Santos-operated Dorado oil discovery, in which Carnarvon also holds a stake, with Pavo-1, in Block WA-438-P, targeting mean recoverable volumes of 82 million barrels of liquid hydrocarbons and 108 billion cubic feet of gas in the Caley Fm interval.

Apus-1 is planned to be drilled in Block WA-437-P, and has two targets, with mean recoverable volumes of 235 million barrels and 408 Bcf (in the Caley and Milne Member sands).
Carnarvon confirms Buffalo-10 well offshore East Timor is a dud


Carnarvon Energy (ASX:CVN) has today confirmed that the Buffalo-10 exploration well offshore East Timor is uncommercial.

“The wireline logging operations have been completed with the oil column deemed to be residual and uncommercial. The well will be left in a safe condition and the rig demobilised,” the company said in a statement.

Drilling at the redevelopment project was targeting a potential oil bonanza, which now seems unlikely. Carnarvon and UK-listed Advance Energy (LON:ADV) were hoping to hit an 80-metre oil column and potential 34 million barrels of remaining oil in the attic area of the Buffalo field.

Carnarvon Energy managing director, Adrian Cook, told Energy Voice last week that the results were disappointing and that his company will now focus on its projects in the Bedout basin offshore Western Australia.

The Buffalo-10 well was drilled offshore East Timor, also known as Timor Leste, in the TL-SO-T 19-14 PSC in which Carnarvon holds a 50% interest and Advance holds the remaining share.
Carnarvon upbeat on Bedout basin after East Timor disappointment

*Energy Voice, 24 January 2022. By Damon Evans*

Australian-listed Carnarvon Energy (ASX:*CVN*) is excited by its projects in the Bedout basin offshore Western Australia following a disappointing drilling result at the Buffalo field offshore East Timor.

Referring to the recently drilled *Buffalo-10* well in East Timor, Adrian Cook, managing director of Carnarvon Energy, told Energy Voice that although the campaign result was not what they had hoped for the company is now ready to turn its attention to their immediate projects in the Bedout basin.

Carnarvon’s partner Santos (ASX:*STO*) will start high impact drilling of Apus-1 and Pavo-1 wells early next month. “There are proven working petroleum systems in the basin, as demonstrated in the four discoveries made to date. As seismic data quality has strengthened, and once Carnarvon has its Apus and Pavo drilling results, future targeted exploration and drilling will likely unveil new opportunity in the Bedout portfolio,” said Cook.

“With only 6% of the prospective basin explored to date, the future of Bedout basin looks exciting,” he added.

Meanwhile Cook said that front-end engineering and design (FEED) work is ongoing at the Santos-led Dorado field, which is one of the biggest discoveries in Australia over the last three decades.

Dorado, also in the Bedout basin, is forecast to cost around $2 billion to develop. The field off Western Australia could potentially be one of the largest oil field developments in Australia over the past decade, with a best estimate of contingent resources pegged at around 150 million barrels of liquids in the first phase. Santos operates Dorado with an 80% share on behalf of Carnarvon, which holds a 20% stake. Although Santos is seeking to farm down its share. Santos has said that it is planning a final investment decision (FID) in 2022.

Phase one will involve the production of oil and condensate through a well head platform and transported by two kilometres of subsea infrastructure to an FPSO.

This concept allows for the optimal integrated development of both the gas and liquids resource and retains sufficient flexibility to support future exploration success. Gas will be reinjected in the initial phase to enhance oil and condensate recovery with initial gross oil production expected between 75,000 and 100,000 barrels per day. Santos said the high-quality crude is likely to earn a premium to regional pricing benchmarks.

Phase two will then develop the significant natural gas resources in the Bedout Subbasin and provide future backfill supply to Santos’ current Western Australian domestic gas infrastructure assets.