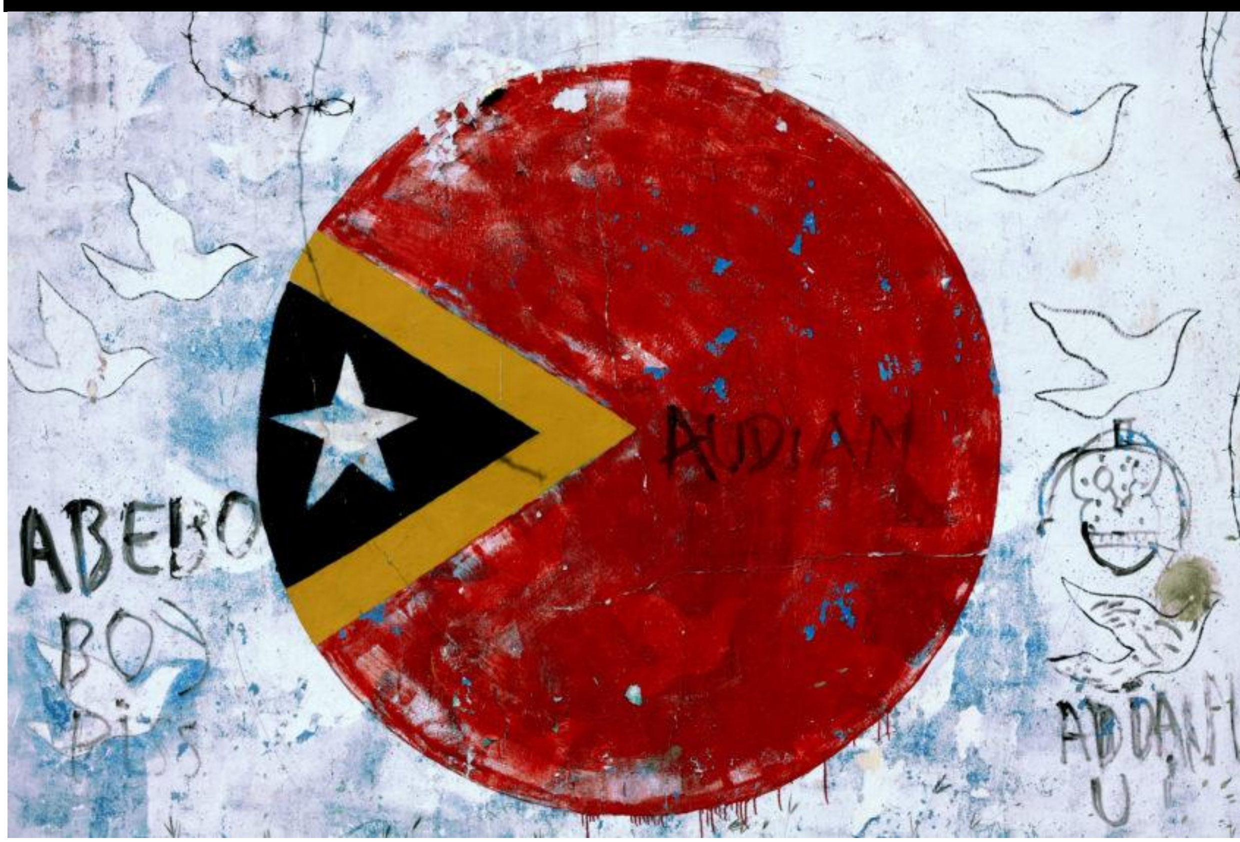
OIL & GAS / ASIA

# Skepticism over Carnarvon's Buffalo field off East Timor

Australian's Carnarvon Petroleum is preparing to begin drilling its Buffalo oil project off East Timor as it targets a potential oil bonanza. However, Carnarvon's claims that previous operator BHP originally missed more than 30 million barrels of oil might be wide of the mark.

by Damon Evans 09/03/2021, 1:47 am




A mural of the East Timorese flag on a wall in Dili, the capital of East Timor. Photo by Damon Evans.

Australian’s Carnarvon Petroleum is preparing to begin drilling its Buffalo oil project off East Timor as it targets a potential oil bonanza. However, Carnarvon’s claims that previous operator BHP originally missed more than 30 million barrels of oil might be wide of the mark.

BHP started production at the field in December 1999 and produced 20.5 million barrels of oil by the time the field was decommissioned in November 2004. Carnarvon was awarded the WA-523-P permit, which included the Buffalo field, in May 2016 for an initial six-year term.

“It seems that BHP missed more oil than was ever produced. Now, Carnarvon, with no producing field, all of a sudden has identified 30 million barrels after reprocessing seismic data acquired from BHP. It seems BHP was too inexperienced. Alternatively, Carnarvon has just been trying to stir interest in order to get funding,” an industry source told Energy Voice.

“The project looks like a scam, just meant to raise funds from unsuspecting investors,” added the source.

Another industry source that was involved with the discovery and development of the Buffalo field in the mid-1990s told Energy Voice “I have always been suspicious of the Carnarvon claim that 30 million barrels remains.”

“BHP is a very good exploration and production company. I simply do not believe they missed 30 million barrels,” added the source.

After Carnarvon took over the field it hired Perth-based DownUnder GeoSolutions (DUG) to reprocess the original seismic data from BHP. DUG used the Full Waveform Inversion (FWI) reprocessing technique, but DUG’s technology was not the best available at that time.

Significantly, FWI requires careful geological input. “FWI is not a sausage machine. I do not know how robust DUG’s work was given that FWI is quite expensive, and Carnarvon are cheapskates. I suspect there may have been a vested interest in the result,” a Carnarvon shareholder, who invested in the company for its Dorado field, told Energy Voice.

“DUG’s FWI algorithms may now be as good as any in the industry, but they were not four years ago,” added the shareholder.

**Still, others are more optimistic.**

“Carnarvon think they can see something on the reprocessed seismic that was not on the legacy data. They think it is a viable development and they have been shopping it around for several years,” a geologist that has reviewed the latest seismic interpretation told Energy Voice.

“The re-processing technique used was technologically like replacing a 1950s newspaper picture image of your face with a HD picture. On the previous (1950s) picture you could see the hair, eyes, nose and mouth. You can now (HD picture) see everything in between and the wrinkles too. Given how poor the prior data was it’s no surprise there is more to be found, but still a risk that the original map was correct,” cautioned the geologist.

Ultimately, Carnarvon do not have enough money to develop Buffalo alone. It is normal to take a joint venture partner through appraisal to mitigate risks. “Given technical risk and fiscal risk in East Timor, few have been ready to commit, although many came to view the data, and I understand there have been multiple highly contingent offers,” added the geologist.

But “many prospective investors were also concerned about the viability of getting development permissions from the Timorese. I think over 30 companies viewed the data room. The partner they have found has raised the money to drill, so in the next few months we’ll get to see…although, the farm-in does look like desperation,” said the source.

The global pandemic and weak oil price environment have made it tough for oil and gas developers to attract investment. Still, in December 2020, Carnarvon announced an agreement with Advance, where Advance would acquire up to a 50% interest in Buffalo by funding the drilling of the Buffalo-10 well up to $20 million on a free carry basis.

“Carnarvon’s farm-in partner is appropriate for this relatively small, but highly profitable opportunity, now that the oil price is back towards $70 per barrel,” Peter Strachan, a Perth-based independent energy analyst told Energy Voice.

Last month, Carnarvon awarded the drilling management contract to UK oilfield services provider Petrofac. The target is to spud the Buffalo-10 hole in second half of 2021.

**A scam?**

“I wouldn’t see it as a scam, but there is residual technical risk, which is why they need to drill a hole. They need other people’s money to do that as they are directing capital towards their Dorado field. There is also residual fiscal risk as the field sits in waters controlled by East Timor following maritime boundary negotiations with Australia in 2018,” said the geologist.

Also “the field wasn’t abandoned by BHP because they ran out of oil. The FPSO lease ran out and the FPSO vessel owner took it somewhere else because BHP didn’t want to pay increase leased rates. I think it was still producing 1,800 barrels per day at abandonment. That level of output in most fields is very economic if you own, and have paid off the bank, for the infrastructure,” added the source.

“I think the management team at Carnarvon have played their luck with Dorado well and are focused on that with Santos as the developer. Santos is incentivised to repeat what Woodside did to FAR in Senegal and will try to bankrupt Carnarvon through the development,” warned the source.

“They could do this by cash-calling until Carnarvon run out of money and then Carnarvon have to forfeit their share if Carnarvon can’t meet the call in time,” said the source.

However, “if Carnarvon can keep up with Santos’s cash demands and they get lucky at Buffalo, they could well be the next mid-cap Australian producer,” added the source.

Dorado 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 in the past decade, with a best estimate of contingent resources of 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. Santos plans to take a final investment decision (FID) at Dorado in 2022.

“The Buffalo redevelopment opportunity is well placed for success given its known production capability and low development cost and will be greatly enhanced as oil prices continue their recovery. We look forward to an exciting year with drilling at the Buffalo Project as well as our Dorado FEED activities and the Apus-1 and Pavo-1 exploration drilling campaign," Carnarvon said in February.

Carnarvon is targeting FID for Buffalo in 2022 with first oil targeted for late 2023.

"Carnarvon has been listed for over 20 years and ran a successful onshore oilfield in Thailand before selling it at the top of the market. The company invested funds wisely and has so far discovered about 222 million barrels of oil and 1.5 trillion cubic feet of gas, in which it has a 20% equity interest alongside Santos," said Strachan.