Rig moving to Pavo-1 location 4 February 2022



Highlights

- Noble Tom Prosser jack-up drilling rig is mobilising to the Pavo-1 well location
- The well, in the Bedout basin, is expected to commence drilling within the week
- The target is similar to the Dorado field's reservoir (Caley) and trap (Canyon)
- The resource estimate is a meaningful 82 million barrels of liquid hydrocarbons (Pmean, gross)

Carnarvon Energy Limited ("Carnarvon") (ASX:CVN) is pleased to announce that the Noble Tom Prosser jack-up drilling rig is currently moving towards the Pavo-1 well location.

Drilling is expected to commence within the next week after allowing for towing and set up.

Carnarvon estimates a gross mean recoverable volume of 82 million barrels of liquids and 108 Bcf of gas.

Carnarvon holds a 30% interest in this resource, meaning the net liquids resource could be similar in volume to Carnarvon's interest in the Dorado field in a success case.



Photo of the Noble Tom Prosser drilling rig

The target reservoir is the Caley Formation sands which flow tested at equipment limits of around 11,000 barrels of oil per day in the Dorado-3 well.

The Pavo-1 well is targeting a prospect with the same reservoir type and trap style as the proven Dorado oil, gas and condensate field. This is an attractive prospect, having an estimated one-in-three (34%) geological probability of success.

After drilling the primary Caley target, the joint venture has the option to drill into deeper stratigraphy including the Lower Archer Formation Dumont Member sands, and the Permian carbonates. Information from these intervals will be highly valuable in assessing the substantial exploration potential north and east of the Pavo prospect.

Following completion of the Pavo-1 well, the rig will drill the Apus-1 well which is located around 20km south-west of the Pavo-1 well location.

ASX disclosure: Prospective Resources are the estimated quantities of petroleum that may potentially be recovered by the application of a future development project and may relate to undiscovered accumulations. These prospective resource estimates have an associated risk of discovery and risk of development. Further exploration and appraisal will be required to determine the existence of a significant quantity of potentially moveable hydrocarbons.



Further details on the Pavo prospect are outlined in the annexure to this report.

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

"The Carnarvon team are excited to be undertaking this next phase of exploration drilling in the Bedout sub-basin.

Targets like Pavo are highly attractive, from an economic and time to develop perspective, given their potential to utilise the nearby Dorado facilities.

The Dorado development is currently in the advanced engineering and design stage with a joint venture Final Investment Decision ("FID") expected to occur later this year. Once FID is achieved, construction of the Dorado production facilities can commence.

In addition to the benefits of Pavo's proximity to Dorado, the resource size and Carnarvon's 30% interest in the resource will make a successful discovery meaningful to Carnarvon.

The proven Bedout basin acreage remains one of Carnarvon's core assets. The basin contains around 100 prospects at the current time. With new 3D seismic acquired in 2021 and this year, we expect to enhance this number and delineate a short list for future exploration programs. While the opportunity within the basin is extensive, right now we are looking forward to seeing the results from this well in the coming weeks."

WA-438-P Equity Participants

Carnarvon Energy Limited
Santos Limited (Operator)

30%

70%

Approved by:

Adrian Cook

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Annexure: further information on the Pavo-1 prospect

The Pavo-1 well is located in WA-438-P and is approximately 160 kilometres north-northeast of Port Hedland and around 40 kilometres east of the Dorado field. Like the Dorado field, the Pavo structure is also in the Bedout Sub-basin and resides in approximately 90 metres water depth (see Figure 2).

The mechanism for hydrocarbons to be trapped within this target reservoir is through top seals provided by Hove Formation Shale, with lateral seals provided by canyon-fill shales, similar to the Dorado field.

The Pavo structure is a broader feature than Dorado, with northern and southern accumulations. The Pavo-1 well will be drilled into the northern accumulation and is targeting a resource of 82 million barrels of liquid hydrocarbons (Pmean, gross), with high side outcomes incorporating a deeper contact allowing a combined culmination.

The Pavo-1 well is expected to encounter the primary Caley reservoirs at a shallower depth compared to offset wells, including those at Dorado, with the reservoir expected to be of excellent quality.

In a success case, a tie back to the Dorado hub would be a strong option to develop the resources.

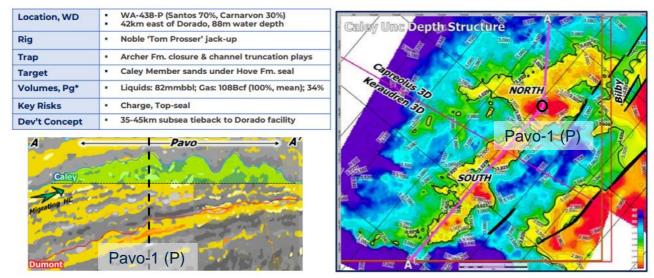


Figure 1: Details of Pavo-1 target



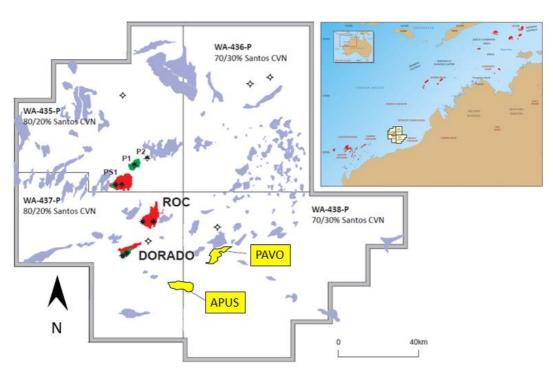


Figure 2: Pavo-1 well location map



Further Prospective Resource Information

The estimates of prospective 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 announcements of 15 October 2018 and 27 September 2020 for more information.

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

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Prospective Resources (100% basis)

	Light Oil MMbbl				Natural Gas BCF				Barrels of Oil Equivalent				Pg
	P90	P50	Mean	P10	P90	P50	Mean	P10	P90	P50	Mean	P10	%
Pavo	11	63	82	179	3	31	108	249	11	68	101	223	34%
Apus	26	160	235	537	30	211	408	963	31	197	307	706	23%
Petrus	12	36	46	90	15	53	79	170	15	46	59	120	29%
Kepler	3	8	12	26	3	12	21	47	3	10	16	34	30%
Bedout Project Total	52	267	375	832	51	307	616	1,429	60	321	483	1,083	

Prospective Resources (Net to CVN basis)

	Light Oil MMbbl				Natural Gas BCF				E	Pg			
	P90	P50	Mean	P10	P90	P50	Mean	P10	P90	P50	Mean	P10	%
Pavo	3	19	25	54	1	9	32	75	3	20	30	67	34%
Apus	7	40	59	134	7	53	102	241	8	49	77	177	23%
Petrus	2	7	9	18	3	11	16	34	3	9	12	24	29%
Kepler	1	2	2	5	1	2	4	9	1	2	3	6	30%
Bedout Project Total	13	68	95	211	12	75	154	359	15	80	122	274	

Prospective Resources are the estimated quantities of petroleum that may potentially be recovered by the application of a future development project and may relate to undiscovered accumulations. These prospective resource estimates have an associated risk of discovery and risk of development. Further exploration and appraisal is required to determine the existence of a significant quantity of potentially moveable hydrocarbons.