

Pavo-1 drilling update

22 February 2022



Carnarvon Energy Limited ("Carnarvon") (ASX:CVN) is pleased to provide an update on the Pavo-1 well that is currently being drilled in the WA-438-P exploration permit.

Progress

Since the last report, the Noble Tom Prosser jack-up drilling rig has drilled the 12 ¼" hole down to a depth of approximately 2,875 metres Measured Depth ("MD") and the 9 5/8" liner is being set in place.

Forward Plan

After the 9 5/8" liner has been set in place, the rig will drill ahead in 8 ½" hole through the expected reservoir interval.

Well Objective

The Pavo-1 well is targeting a gross mean recoverable volume of 82 million barrels of liquids and 108 Bcf of gas in the Caley Formation sands which flow tested at equipment limits of around 11,000 barrels of oil per day in the Dorado-3 well. This is an attractive prospect, having an estimated one-in-three (34%) geological probability of success.

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.

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.

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

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.

WA-438-P Equity Participants

Carnarvon Energy Limited
Santos Limited (*Operator*)

30%
70%

Approved by:



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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.

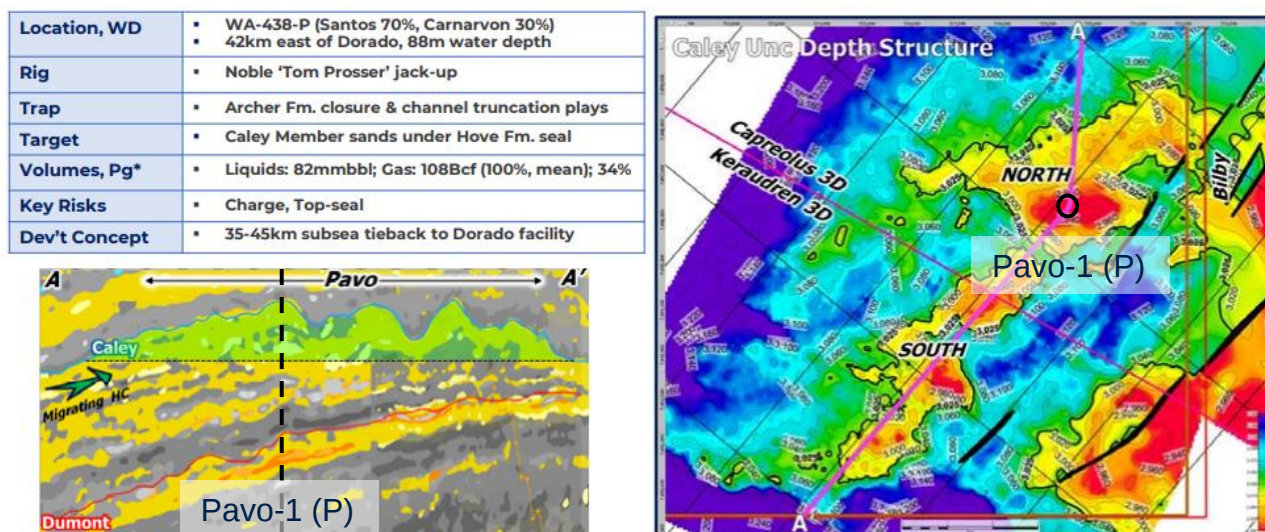


Figure 1: Details of Pavo-1 target

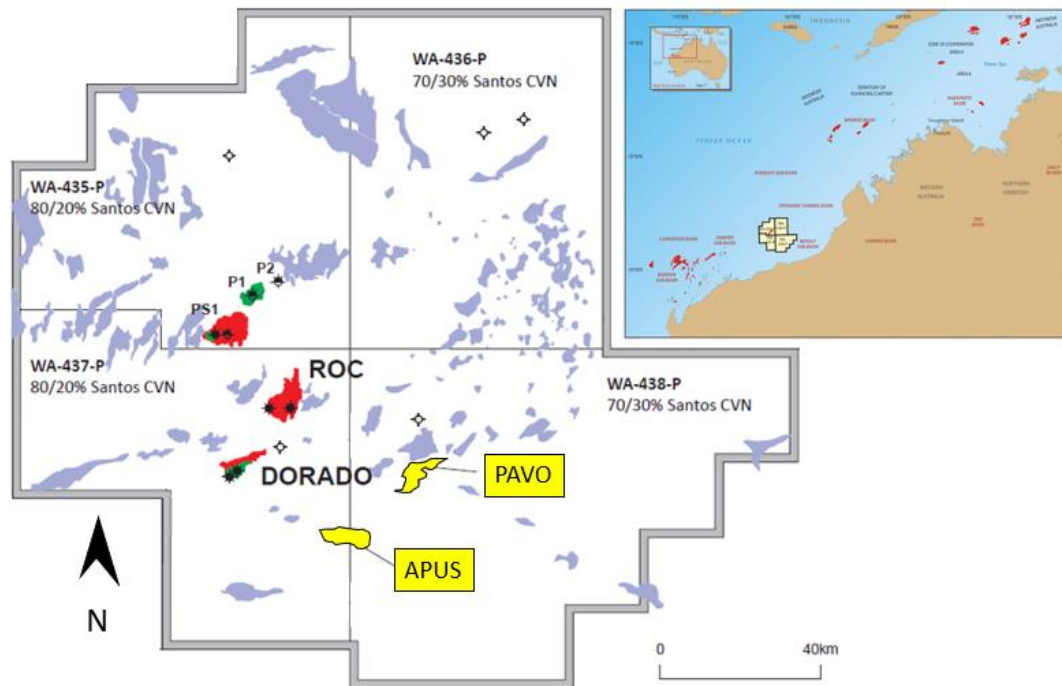


Figure 2: Pavo-1 well location map

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.

Forward-looking statements

This announcement contains certain "forward-looking statements", which can generally be identified by the use of words such as "will", "may", "could", "likely", "ongoing", "anticipate", "estimate", "expect", "project", "intend", "plan", "believe", "target", "forecast", "goal", "objective", "aim", "seek" and other words and terms of similar meaning. Carnarvon cannot guarantee that any forward-looking statement will be realised. Achievement of anticipated results is subject to risks, uncertainties and inaccurate assumptions. Should known or unknown risks or uncertainties materialise, or should underlying assumptions prove inaccurate, actual results could vary materially from past results and those anticipated, estimated or projected. You should bear this in mind as you consider forward-looking statements, and you are cautioned not to put undue reliance on any forward-looking statement.

Prospective Resources (100% basis)

	Light Oil				Natural Gas				Barrels of Oil Equivalent				Pg
	MMbbl				BCF				MMboe				%
	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				Natural Gas				Barrels of Oil Equivalent				Pg
	MMbbl				BCF				MMboe				%
	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	

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