

# Drilling rig at Pavo-1 well site

## 9 February 2022



### Highlights

- The Noble Tom Prosser jack-up drilling rig is at the Pavo-1 well site
- The rig has completed pre-drill preparations and is about to commence drilling
- Pavo-1 is targeting Caley reservoir sands in a similar canyon style trap to the Dorado field
- 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 has arrived at the Pavo-1 well site in the WA-438-P exploration permit and is ready to commence operations.

### Progress

The Noble Tom Prosser jack-up drilling rig has completed the move to the Pavo-1 well location and has concluded the jack-down and other pre-drill operations.

As at 06:00 this morning the rig was preparing to commence drilling the surface hole.

### Forward Plan

The rig will drill the surface hole down to around 175 metres Measured Depth ("MD") and install the Conductor.

After the Conductor has been set and cemented in place, the rig will drill the 17 ½" hole to the planned section depth of approximately 1,000 metres MD followed by setting the 13 3/8" casing. The well will then be deepened in the 12 ¼" hole to around 3,000 metres MD before setting the 9 5/8" liner. This will provide a stable foundation for the well to drill into the deeper reservoir section.

No hydrocarbons are anticipated to be encountered in these hole sections.

### 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.

*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.*

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.

#### **WA-438-P Equity Participants**

<b>Carnarvon Energy Limited</b>	<b>30%</b>
Santos Limited ( <i>Operator</i> )	70%

Approved by:



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Managing Director  
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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.

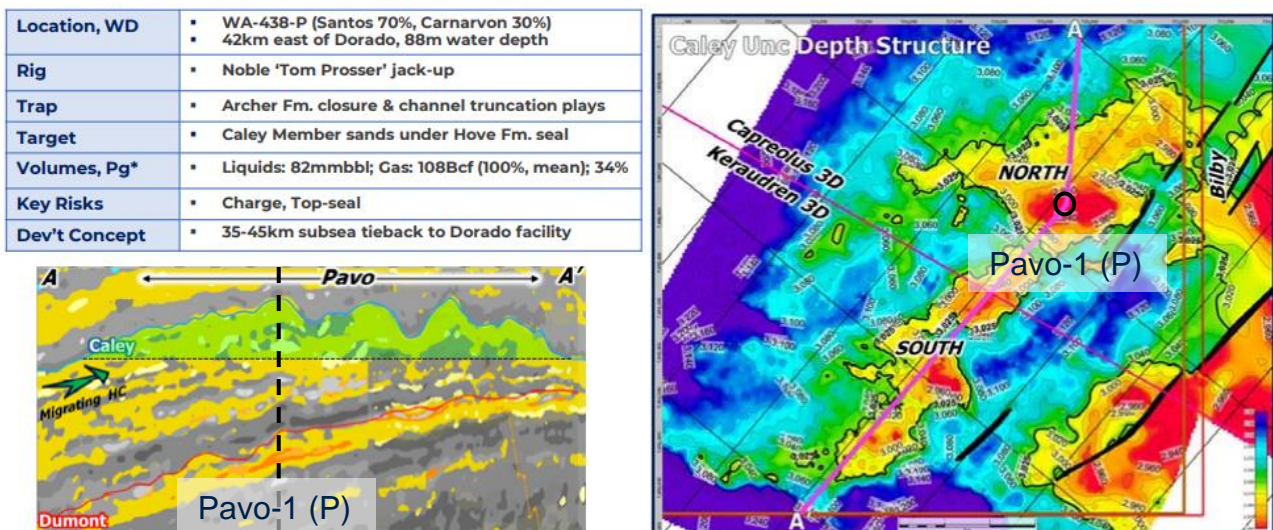


Figure 1: Details of Pavo-1 target

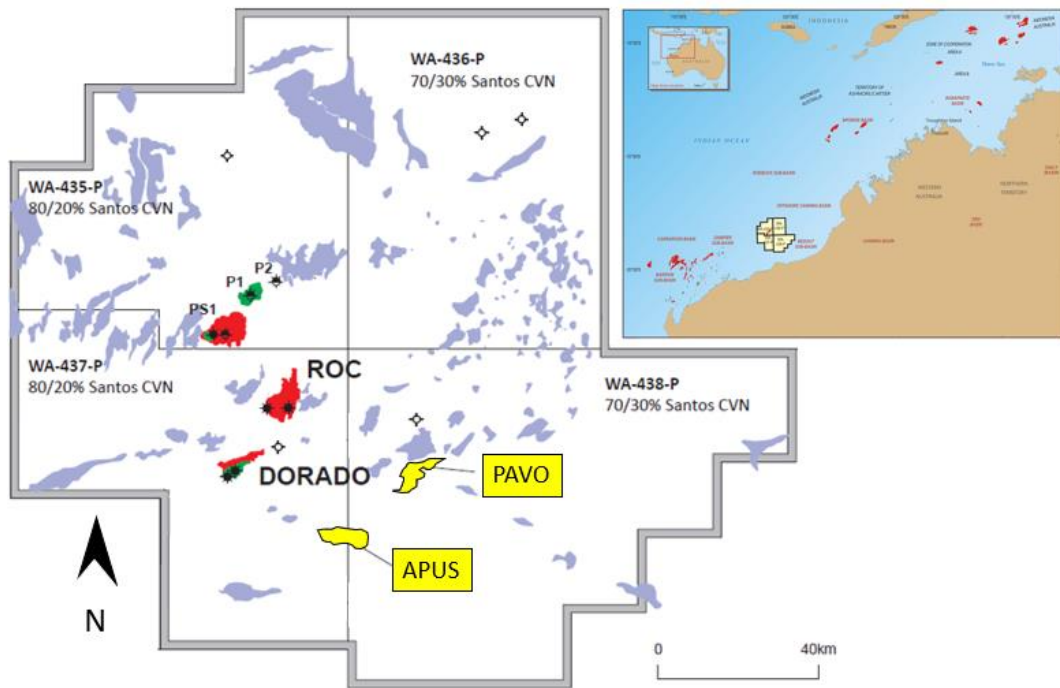


Figure 2: Pavo-1 well location map

### **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.

### 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%
<b>Bedout Project Total</b>	<b>52</b>	<b>267</b>	<b>375</b>	<b>832</b>	<b>51</b>	<b>307</b>	<b>616</b>	<b>1,429</b>	<b>60</b>	<b>321</b>	<b>483</b>	<b>1,083</b>	

### 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%
<b>Bedout Project Total</b>	<b>13</b>	<b>68</b>	<b>95</b>	<b>211</b>	<b>12</b>	<b>75</b>	<b>154</b>	<b>359</b>	<b>15</b>	<b>80</b>	<b>122</b>	<b>274</b>	

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