New Permit Award and Phoenix Update CARNARVON

New Permit Award

Carnarvon Petroleum Limited ("Carnarvon") (*ASX: CVN*) is pleased to announce that it has been successful in its bid for 100% of a new permit gazetted by the Australian government, WA-443-P, offshore Western Australia. This new exploration permit is situated adjacent to Carnarvon's four existing permits WA-435-P, WA-436-P, WA-437-P and WA-438-P in which it holds a 50% interest, referred to as the Phoenix permits, within the Bedout Sub-Basin.

The Bedout Sub-Basin is situated to the north of the Carnarvon Basin. Exploration drilling over this area totals six wells drilled in two main phases in the early 1970's and early 1980's and a more recent seventh well drilled by Apache Energy in 1995. Drilling resulted in the discovery of significant gas intersections averaging approximately 700 metres in two wells. Carnarvon now has a spread of five permits in this highly prospective basin covering a large area of 28,300 km² with large participating interests and with low work commitments.

CVN's Acreage in the Bedout Sub-Basin:

- New permit award
- Interest in five permits covering 28,300 km²
- Contains Phoenix gas discoveries
- Prospects and leads with multi-Tcf recoverable resource potential



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Update

Phoenix Permits WA-435, 436, 437 & 438-P (Carnarvon 50%)

Three wells have been drilled to date in WA-435-P. Minilya-1 (drilled by BOC in 1974) encountered good reservoir sandstones but was drilled outside of closure (based on later seismic data) and encountered no hydrocarbon accumulations. The next well, Phoenix-1, drilled by BP in 1980 to a total depth of 4,880 metres, encountered a 767 metre gross gas section in Middle Triassic low-porosity reservoirs (up to a possible 110 metre net gas-bearing sandstone reservoir). Due to inadequate pressure control equipment the well was not tested. The follow-up well Phoenix-2, drilled by BP in 1982, was drilled to the northeast of Phoenix-1 and encountered a gross 678 metres of gas-bearing section in lower porosity Middle Triassic reservoirs. The well was not tested. The poor gas market and low gas prices at the time resulted in no further appraisal work being carried out in the area.

The presence of gas columns in Phoenix-1 and Phoenix-2 indicate that there is an active Triassic petroleum system in the area which is encouraging for further work. Water depth is shallow, being approximately 100 metres deep at the Phoenix wells. The permits are located close to the coast being approximately 150 kilometres from the gas pipeline at Port Hedland making commerciality of a significant gas discovery possible.

Carnarvon has identified eight large leads and prospects with multi-Tcf potential of recoverable gas. The gas discovered in Phoenix-1 and -2 wells was never tested so it is unknown whether commercial flow rates can be obtained in that part of the permit. However, from regional well data (e.g., in Keraudren-1) reservoir quality is known to improve to the south of the Phoenix wells.

An exploration programme comprising an 1,100 km² 3D seismic survey and a 430 km 2D seismic survey is expected to commence in July 2010, and a 15,850 km² aeromagnetic survey is expected to commence early next month. These new data will enable evaluation of the identified prospects and leads at a cost net to Carnarvon of approximately A\$3 million. Computer processing and interpretation of these data is expected to be completed during Q4 2010.

Once the interpretation is complete, Carnarvon intends to farm out a portion of its interests for a financial carry through an exploration drilling programme yet to be defined. Drilling will commence as soon as possible after this farm-out.

Permit WA-443-P (Carnarvon 100%)

No previous drilling has taken place in the WA-443-P block. One large Middle Triassic prospect has been interpreted, the Jaubert Prospect, which is a faulted anticlinal closure. The structural form and size of the prospect are comparable to the Phoenix group of potentially large gas accumulations. Carnarvon has secured this new permit with a firm programme over three years to reprocess and interpret 1,400 km of 2D seismic. Geological and geophysical studies will also be carried out in conjunction with similar work in the Phoenix permits.