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Company Announcements Office Australian Stock Exchange Limited

Via ASX Online

**Dear Sirs** 

## L44-H FLOWS OIL 1,265 BOPD

## **EXPLORATION PERMIT L44/43**

## L44-H Appraisal Well

The L44-H well is located in the central lobe of the Na Sanun East ("NSE") oil field, approximately 3.25 kilometres north of the producing NS3-D1 well.

Well testing is continuing and a stable rate of 1,265 bbls/day has been achieved. The oil is good quality at 35 degree API. A small amount of water is being produced varying from 0.7% to 1.2% as the well continues to clean up and unloads the remainder of the drilling fluids lost into the reservoir while drilling ("lost circulation").

The well is free flowing on choke settings of 8/64 inch on the annulus and 17/64 inch on the tubing. Flowing casing head pressure is 220 psi and flowing tubing head pressure is 280 psi indicating the well may be capable of oil production at even higher rates.

L44-H penetrated the top 14.5 meters of the target volcanic reservoir interval at a depth of approximately 866 meters. Lost circulation (an indicator of good quality, fractured reservoir) was encountered at three levels with total drilling fluid losses of more than 1,100 barrels. Electric logs indicated the best volcanic reservoir section yet encountered in any well over the entire 14.5 meter thick volcanic interval. This has been confirmed by the excellent oil flow rate.

L44-H is the first appraisal well drilled into the central fault compartment of the Na Sanun East structural closure. The test results confirm the hydrocarbon potential of this second large fault compartment within the NSE structure. This is in addition to the area of confirmed hydrocarbon potential within the southern fault compartment of Na Sanun East that has been penetrated by the producing wells POE-9 and NS3-D1.

An additional three locations have been built to appraise this central fault compartment, anticipated to be drilled by year end. One of these wells will attempt to define the currently unknown oil water contact. This will be important to enable reserves estimates to be calculated. An additional seven drilling locations in the central fault compartment are anticipated to receive environmental approval within the next 30 days.

## **NS8-D1 Appraisal Well**

The Aztec #7 rig has moved off location L44-H and is currently drilling ahead at a depth of 240 meters on deviated well NS8-D1. Drilling is anticipated to take up to 21 days to complete.

NS8-D1 is a further appraisal/development of the southern Na Sanun East fault block in addition to the two successfully producing wells POE-9 and NS3-D1.

The well is being drilled as a deviated well eastwards across the bounding fault into the Na Sanun East structure. NS8-D1 is around 600 metres north of the producing NS3-D1 well.

## L44G-D1 Appraisal Well

L44G-D1 is located in the north fault block of the seismically defined Na Sanun East structural closure, approximately 7.4 kilometres north of the producing NS3-D1 well and 585 metres northwest of the previously drilled L44-G well.

The L44G-D1 well is a deviated well that has now been drilled to a total measured depth ("MD") of 1,136 meters (907 meters true vertical depth ("TVD"))

The well encountered multiple potential volcanic reservoirs at 736-755, 771-804, 836-850, 867-896 and 955-1,136 meters MD. These intervals are in addition to the approximately 80 meter thick volcanic zone encountered in the first logging run prior to setting intermediate casing. Lost circulation (an indicator of good reservoir development) of 17 bbls/hr was encountered at 867 meters MD and 53 bbls/hr at 1,112 meters MD. Numerous oil shows and high mud gas readings were observed throughout the well.

The well has been completed for well testing which is anticipated to commence within a week.

## L44-G Appraisal Well

Drilling of the L44-G well was completed some weeks ago, but flow testing was delayed while the drilling of the sidetrack well L44G-D1, from the same surface location, was in progress due to the close proximity of the two well's concrete cellars. This did not allow access for a service rig or installation of surface facilities while the AZTEC #14 was drilling on location.

Both wells are located within the large but as yet untested northern fault compartment of the NSE structural closure.

As previously reported, lost circulation, an indicator of good reservoir quality, was encountered within the volcanic section similar to the lost circulation in the other successfully producing wells.

Testing at L44-G well is anticipated to commence within the next week.

# **NS3-D1 Appraisal Well**

Extended well testing is continuing with production rate stable at around 420 bbls/day in line with previously reported rates.

## NS-4 Appraisal Well

Alterations to the ongoing well test at NS-4 have had a positive effect with production rate stabilised at around 310 bbls/day while water production has decreased significantly to negligible levels.

### **NS2-D1** Appraisal Well

The Aztec #14 rig is 70% moved off location L44G-D1 and is rigging up on NS2-D1, located within the south fault compartment of the Na Sanun East structural closure between the producing NS3-D1 and POE-9 wells. Drilling is expected to commence in 4 days and anticipated to take up to 21 days to complete.

### **Ongoing Work**

An inventory of 8 further drilling locations are currently built and ready for drilling operations targeting the Na Sanun East structural closure. Environmental approval is anticipated for another 19 locations at Na Sanun East and 15 locations at Wichian Buri/POE-6 to be granted in October. Another 6 exploration drilling locations are either built and ready, or purchased and awaiting drill pad construction. These exploration wells will be brought into the current appraisal and development drilling program as circumstances dictate.

## **Contingent Resources for NSE**

The successful flow test at L44-H has confirmed the oil flow potential of the central fault block in the Na Sanun East structure and gives further confidence for the mid case contingent resources for Na Sanun East Oil Field of 29.2 MM bbls (11.7 MM bbls net to Carnarvon). The Na Sanun East field is currently flowing at around 2,000 bbl/d (from POE-9. NS3-D1 and L44-H) with further increases expected from the L-44G and L44G-D1 wells. Results from these wells are anticipated to be available in the next 2-3 weeks.

Total production from the Phetchabun Basin permits is now around 2,500 bbl/d (1,000 bbl/d net to Carnaryon).

#### Comment from the CEO

The Carnarvon CEO "Ted Jacobson" commented:

"We now have 3 producing wells flowing oil on the upfaulted Na Sanun East Field and one producing well flowing oil in the downfaulted Na Sanun Field. These are all within the new fractured volcanic reservoir which has now become the major producing reservoir for our Phetchabun Basin Permits. This is a great result, bearing in mind that we are only flow testing one of the four potential volcanic zones intersected in the wells. The deeper zones will be tested at a later date. Development of the Na Sanun East Field is our immediate priority, but significant potential also exists in other nearby large structures such as Bo Rang and Si Thep where lost circulation was reported in previously drilled wells.

The joint venture is now up to a daily oil production rate of 2,500 bbl/d. Although we are not yet in a position to report firm reserves, our initial estimates of almost 12 million barrels of recoverable oil net to Carnarvon as contingent resource within the NSE Field, shows the large potential of these sorts of reservoirs. This is in addition to the 3 mmbls of net recoverable oil reserves assigned to the Wichian Buri Oil Field by independent consultant Gaffney Cline and Associates and in addition to anything we might find in the Bo Rang and Si Thep structures.

Two more wells are to be tested with results expected in the next 2 to 3 weeks. Combined with a continuous ongoing drilling programme of exploration, appraisal and development wells, there should be plenty more excitement over the coming weeks and months."

Yours faithfully Carnaryon Petroleum Limited

> RA Anderson Company Secretary

