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Company Announcements Office ASX Limited

Via ASX Online

Dear Sirs,

# ONSHORE THAILAND OPERATIONS – NSE-F1 OIL DISCOVERY

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Carnarvon Petroleum Limited ("Carnarvon") is pleased to report further exploration and appraisal successes from its ongoing drilling programme within onshore Thailand, where Carnarvon has recently announced a 46% reserves upgrade to Proven + Probable (2P) reserves of 16.6 million barrels of oil. The focus of the recent drilling campaign has been on further increasing reserves whereas upcoming wells will focus on production increases.

#### Highlights of recent drilling

- NSE-F1 exploration well producing at 60 bopd –new oil discovery
- NSE-H1 appraisal well producing at 630 bopd
- NSE-H2 appraisal well near completion mud losses and oil observed
- NSE-G1 appraisal well encounters encouraging oil shows up dip potential
- L44-W high impact exploration well drilling ahead

Results of Carnarvon's recent drilling and forward plans for the exploration and appraisal programme are outlined below.

# NSE-F1 Discovery (CVN 40% working interest and non-operator)

The NSE-F1 well is currently producing 43-47 degree API oil (versus 36 degree API oil in the Na Sanun East Field) at approximately 60 bopd with a water cut of approximately 15%. This different oil type is interpreted by Carnarvon to possibly indicate a different source and separate reservoir compartment to the main NSE oil reservoir. This discovery is located approximately 1 kilometre northeast of the nearest NSE central field producer, NSE-C1, and demonstrates further commercial production potential in the Na Sanun East field. In addition, this NSE-F1 discovery upgrades the potential of a large fairway due east of the main NSE central field and south of the Bo Rang gas discovery which has previously been assessed to contain significant contingent oil resources.

# NSE-H1 appraisal well (CVN 40% working interest and non-operator)

The NSE-H1 well, located in the north east portion of the NSE central fault compartment, is currently on production at a rate of 630 bopd. This well is still cleaning up extensive drilling fluid losses with a water cut of approximately 7% and decreasing.

# NSE-H2 appraisal well (CVN 40% working interest and non-operator)

Casing is about to be set in the NSE-H2 well after encountering the main volcanic objective in the northern portion of the NSE central fault compartment. This well was drilled approximately 350 metres northeast of the NSE-H1 well location. Drilling fluid losses of 300 bbls/hr were encountered while drilling the target volcanic zone and oil was observed in the drilling mud.

At the completion of drilling, the NSE-H2 well will be tested and the rig skidded over on the pad to drill NSE-H3. This well has a subsurface target 704 metres southwest of the NSE-H2 subsurface target location.

#### L44-W exploration well (CVN 40% working interest and non-operator)

The L44-W high impact exploration well is located 4.7 kilometres north of the Bo Rang-1 gas discovery and is targeting multiple volcanic objectives. Bo Rang-1 was drilled in 1988 by a previous operator and encountered 6 separate volcanic zones with severe lost circulation experienced while drilling, which is indicative of good reservoir development.

The well is currently drilling ahead just above the main volcanic objective. Prior to setting intermediate casing, the top 2 metres of a secondary volcanic objective had been encountered with mud losses and oil shows observed while drilling.

A shallower (third) volcanic zone was penetrated at 363 metres true vertical depth ("TVD") exhibiting high mud gas readings and oil shows. Image logs run over this interval indicated extensive fracturing.

It is anticipated that testing of multiple zones will take place at the completion of drilling.

# NSE-G1 appraisal well (CVN 40% working interest and non-operator)

The NSE-G1 appraisal well was drilled to a subsurface location north of the NSE-D3 well and is targeting the main volcanic reservoir along the boundary of the central and north fault compartments. Approximately 12 metres of main volcanic reservoir was encountered at 783 metres TVD with elevated mud gas readings and oil shows over the majority of this interval. Prior to logging, the decision was made to continue drilling in order to test a deeper volcanic objective on the down dip flank of a large structural closure. At 1,085 metres TVD, the top of an approximately 100 metre thick volcanic zone was penetrated and drilled to a depth of 1,196 metres TVD where total drilling fluid losses and strong oil shows were encountered. Although testing recovered only water subsequent interpretation of the data provided by this well indicates a large area up dip that will be tested in a future side track from the existing well bore.

# NSE-D2ST2 appraisal well (CVN 40% working interest and non-operator)

The NSE-D2ST2 sidetrack well is currently on production at a rate of approximately 143 bopd. A plan to increase production using an electrical submersible pump installation (ESP) was unsuccessful due to the high gas cut in this well.

# L44-R2 appraisal well (CVN 40% working interest and non-operator)

L44-R2 was drilled approximately 700 metres north of the L44-R discovery. Testing of the main volcanic reservoir objective resulted in no recovery as the zone was tight. The operator is currently investigating the application of fracture stimulating this reservoir as a means of upgrading the 6.4 million barrels (100%) of mid case contingent resources, as evaluated by Gaffney Cline & Associates, into reserves.

# **Summary**

As a result of natural decline of initial test rates and a number of wells now on pump after initially free flowing, production is currently around 9,000 bopd gross (3,600 bopd net to Carnarvon) after peaking at over 14,000 bopd gross (5,600 bopd net) at year end resulting in estimated quarterly production of approximately 10,500 bopd gross (4,200 bopd net). Average water cut across all the production wells is approximately 15%.

Recent drilling activity has been focused on evaluating the potential of the L44 concession with the vast majority of the wells drilled in the past 3 months targeting new reserves as opposed to continued NSE field development and the drilling of additional production wells. This recent drilling has been successful overall and has resulted in a new field discovery at NSE-E1 with 2.9 MM gross barrels (1.1 MM barrels net) of recoverable 2P reserves, the NSE-F1 discovery of size yet to be determined, the recovery of 15 barrels of oil from a new volcanic zone below the proven NSE central main volcanic reservoir at NSE-E2 and the encouraging preliminary results from the L44-W high impact exploration well that is anticipated to begin testing soon. In addition, the potential of another deeper play has been defined with the results of NSE-G1, which will be side-tracked to evaluate the 100 metre thick volcanic interval, which was encountered below the main reservoir, in a higher structural position.

The Operator, Pan Orient, currently has a total inventory of 17 development locations on the NSE south and central structures that we estimate will be capable of 500 bopd per well, after initial declines. The joint venture is also currently building two locations to evaluate the NSE north fault compartment discovery made 2 years ago. Subsequent to the first two wells drilled on this structure, L44G-D1 and L44-G, a 3D seismic survey was acquired over the area better defining this stratigraphic and structurally complex area.

Looking ahead, the development drilling program will be more active than in the past 3 months in order to build production up to a stable plateau targeting between 12,000 to 15,000 bopd gross (4,800 to 6,000 bopd net). These targets will be reviewed in the event of any exploration drilling success.

Further exploration drilling, in addition to that described earlier, will be targeting high impact prospects at Bo Rang, and Si Thep deep.

Yours faithfully,

Carnarvon Petroleum Limited

Ted Jacobson

Chief Executive Officer

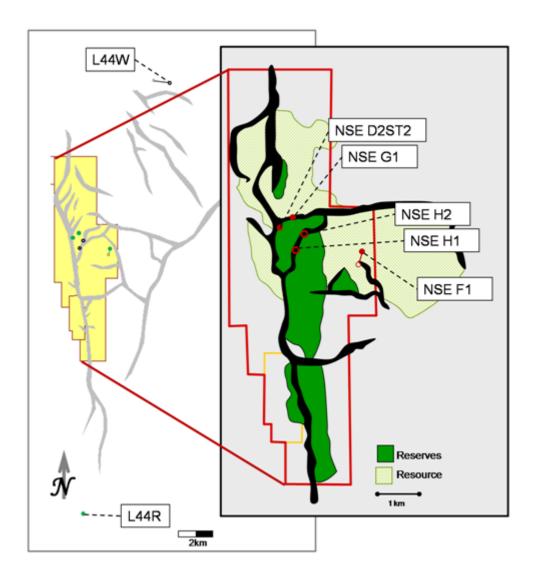


Figure 1: Indicative well locations on shore Thailand within the L44/43 exploration permit and Na Sanun East production license.