

14 October 2009

Company Announcements Office ASX Limited

Via ASX Online

Dear Sirs,

## Thailand Update: Appraisal success in L44-W and Bo Rang

Carnarvon Petroleum is pleased to announce that it has confirmed the testing of oil at commercial rates of 548 bopd from the second horizontal appraisal (L44-VD2ST2) of the Bo Rang "A" field and confirmed hydrocarbons (possible gas cap to an oil leg) in a shallow volcanic above the L44-W field within the L44/43 concession onshore Thailand.

Drilling of the Si Thep-2 exploration well has also commenced. The Si Thep-2 well is located . directly adjacent to the old Si Thep-1 well that has produced approximately 70,000 barrels of oil from a shallow sandstone reservoir at approximately 600 meters depth. Lost circulation (indicating good fractured reservoir) in deeper volcanics was encountered within several zones in this previous well but was not tested.

# **Summary**

- L44-VD2ST2 successfully testing at 548 bond from Bo Rang A reservoir
- **L44-W2** tested gas at 0.5 MMcf/day from a 20 meter thick shallow volcanic zone at a depth of 362 meters oil leg potential downdip of gas cap
- **L44-W4ST1** test resulted in the recovery of drilling fluid, oil and natural gas from the main volcanic reservoir (approximately 2.2MMcf/d) undergoing further testing
- L44-W3ST1 horizontal appraisal well is currently drilling ahead
- Si Thep-2 (Si Thep Deep) exploration well is drilling ahead

### Bo Rang "A" Field (lower volcanic zone)

### L44-VD2ST2 Appraisal well (40% working interest and non-operator)

L44-VD2ST2 is currently producing on a 90 day production test allowance at a stabilised rate of 548 barrels per day of 35 API gravity oil with minor amounts of gas and a BS&W of approximately 0.01%.

This well was the second horizontal well drilled into the Bo Rang "A" reservoir and confirms the successful application of this and other techniques that were utilised during the drilling of this well. Of particular note, no drilling fluid losses were observed during the drilling of the target interval (an indicator of massive fractures) yet commercial rates were achieved on test. The results of L44-VD2ST2 have initiated a review of the application of these new drilling techniques to all previously drilled wells where the target volcanic interval was indicated to be tight (low permeability).

#### **L44-W Field**

## L44-W2 Appraisal well (40% working interest and non-operator)

L44-W2 tested sweet gas at rates of approximately 0.5 MMcf/day from a 20 meter thick volcanic zone at a depth 362 meters during a 24 hour test. Good oil shows were observed while drilling through this same zone in the offsetting L44-W well. As experienced at Bo Rang A and the deeper main volcanic zone at L44-W, oil is often encountered down flank below small gas caps. Theses gas caps are an important part of the drive mechanism for recovering hydrocarbons to surface at good flow rates. A future appraisal well will be targeting a possible oil leg to this shallow volcanic zone. There are currently no resources attributed to this zone in the August 31, 2009 GCA resource evaluation report.

An additional approximately 25 meter thick shallow zone at 260 meters will be tested shortly. While drilling this second shallow zone, massive drilling fluid losses of approximately 6,000 barrels were experienced along with highly elevated mud gas readings. There are currently no resources attributed to this zone in the August 31, 2009 GCA resource evaluation report.

## L44-W4ST1 Appraisal well (40% working interest and non-operator)

The L44-W4ST1 well was the first horizontal that was drilled into the L44-W structure encountering the main volcanic target reservoir approximately 30 meters structurally higher than the L44-W discovery well.

A brief 14 hour test was completed utilising Pan Orient's three phase test separator that resulted in the recovery of drilling fluid, oil and natural gas (approximately 2.2MMcf/d) with pressures and volumes beyond the safe operating capacity of the test separator. A larger capacity three phase separator is expected to be onsite within three days at which time the test will recommence.

# L44-W3ST1 Appraisal well (40% working interest and non-operator)

The L44-W3ST1 horizontal appraisal well is currently drilling ahead horizontally with severe drilling fluid losses (extensive fracturing) and live oil observed at surface within the main volcanic objective.

### Si Thep Field

## Si Thep-2 Exploration Well (40% working interest and non-operator)

The Si Thep-2 (Si Thep Deep) exploration well is currently drilling ahead at a depth of approximately 450 meters on the way down to the main volcanic reservoir objective estimated to be encountered at approximately 1,100 meters true vertical depth. The well is anticipated to be drilled horizontally after the initial pilot section has been completed. Drilling is anticipated to be completed within 21 days.

Si Thep-2 well is located approximately 9 kilometers south of the NSE South oil field and directly adjacent to the Si Thep-1 well that has produced approximately 70,000 barrels of oil from a sandstone reservoir at approximately 600 meters depth. The primary objective of the Si Thep-2 well is a deep volcanic reservoir target within a large structural closure below the shallow producing sands.

Yours faithfully, Carnarvon Petroleum Limited

Ted Jacobson

**Chief Executive Officer** 

Permit Holders L44/43

Pan Orient Energy (Operator)

60% 40%

**Carnarvon Petroleum**