

18 September 2009

Company Announcements Office  
ASX Limited

Via ASX Online

Dear Sirs,

### **Thailand Concession L44 Resource Estimates**

Carnarvon Petroleum Limited ("Carnarvon") is pleased to provide the results of an independent resource estimate conducted by Gaffney Cline & Associates-Singapore ("GCA"). The purpose of the resource assesment is to assist in the preparation and application of a production license ("PL") over these recent discoveries.

#### **Bo Rang A and B**

Net contingent resources, at a 2C confidence level, for these structures totalled 9.6 MMbbls.

#### **L44-W**

Net contingent resources, at a 2C confidence level, for this structure within the L44/43 concessions totalled 1.7 MMbbls. Those portions of the L44-W discovery structure extending into concession L33 were not assessed in this resource report.

#### **NSE-F1 (Extension)**

Net prospective resources for the NSE-F1 extension total 4.1 MMbbls net to Carnarvon.

#### **CEO COMMENT**

Carnarvon's CEO, Ted Jacobson commented:

"This mid-year independent assessment of resources was required as background for a PL application incorporating all three areas. The results demonstrates the success of the company's Q2/Q3 2009 exploration program. The timing of translating these contingent resources of 11.3 MMbbls to reserves, representing a significant amount when compared to Carnarvon's end 2008 assesment of 2P reserves of 16.6 MM bbls, is largely dependent upon the granting of the PL and continued succesfull appraisal program.

These structures all have successful well tests, as reported over the past few weeks, adding to the confidence of meaningful production volumes coming from this area upon the granting of the PL.

Going forward, before year end 2009 the company intends to continue to appraise the three fields with defined contingent resources and drill at least one additional high impact exploration wells into the volcanics in the Si Thep area in the L44/43 concession."

## INFORMATION REGARDING THE PREPARATION OF THIS RESOURCE STATEMENT

The information in this Resource Statement has been compiled by Philip Huizenga, a full-time employee of Carnarvon. Philip Huizenga is qualified in accordance with ASX listing rule 5.11 and has consented to the form and context in which this statement appears.

**Contingent resources** are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from known accumulations using established technology or technology under development, but which are not considered to be commercially recoverable due to one or more contingencies. Contingencies may include factors such as economic, legal, environmental, political and regulatory matters, or a lack of markets. It is also appropriate to classify as contingent resources the estimated recoverable quantities associated with a project in the early evaluation stage.

**Prospective resources** are those quantities of petroleum estimated, as of a given date, to be potentially recoverable from undiscovered accumulation by application of future development projects. Prospective resources have both an associated chance of discovery and a chance of development.

Net Crude Oil Contingent Resource Volumes  
Thailand L44/43 Concession Area  
As of August 31, 2009 provided by Gaffney, Cline & Associates  
Carnarvon Net 40% (MMSTB)

	1C	2C	3C
L44/43			
Bo Rang			
A Volcanic reservoir	1.3	4.1	9.5
B Volcanic reservoir	0.5	5.5	17.5
Total	1.8	9.6	27.1
L44W	0.9	1.7	3.0
Grand Total	2.7	11.3	30.1

Notes:

- 1 Volumes are stated on a net working interest basis. Carnarvon's working interest in the L44/43 concession is 40%.
- 2 These volumes include royalties due to other parties.
- 3 Totals may not add exactly due to rounding errors.
- 4 Contingent Resources are a sub-classified under the "Development Pending" category of project maturity.
- 5 The figures presented in this table must be considered only in the light of comments contained in the letter from GCA dated September, 2009 of which this table forms an integral part.

Net Crude Oil Prospective Resource Volumes  
 Thailand L44/43 Concession Area  
 As of August 31, 2009 provided by Gaffney, Cline & Associates  
 Carnarvon Net 40% (MMSTB)

	Low Estimate	Best Estimate	High Estimate
L44/43			
NSE-F1 (Extension)	1.3	4.1	10.7
Grand Total	1.3	4.1	10.7

Notes:

- 1 Volumes are stated on a net working interest basis. Carnarvon's working interest in the L44/43 concession is 40%.
- 2 These volumes include royalties due to other parties.
- 3 The chance of discovery for the NSE F1 (Extension) is assigned as 90%.
- 4 The chance of development for the NSE F1 (Extension) is assigned at 78%.
- 5 The figures presented in this table must be considered only in the light of comments contained in the letter from GCA dated September, 2009 of which this table forms an integral part.

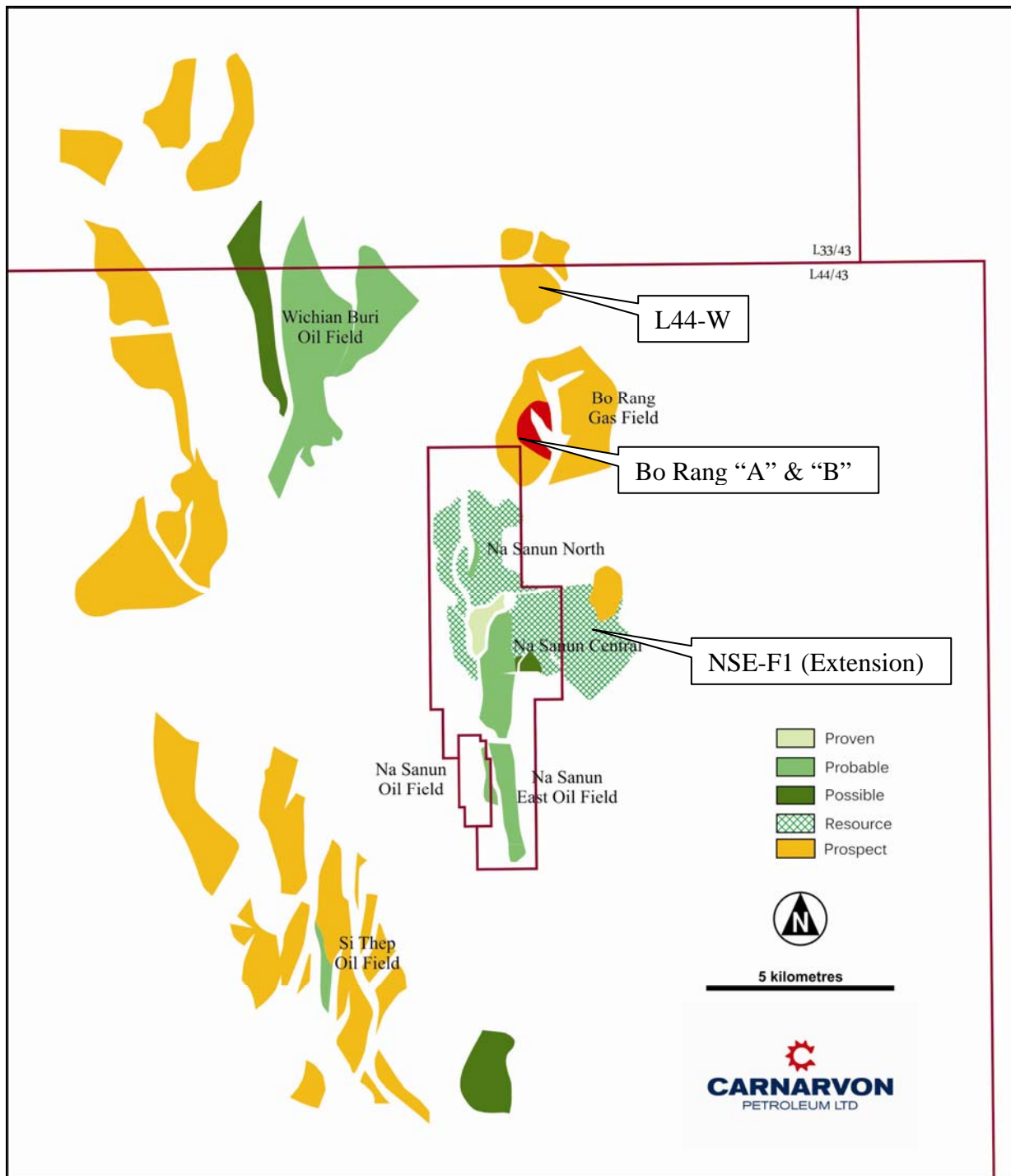
Yours faithfully,  
 Carnarvon Petroleum Limited



Ted Jacobson  
 Chief Executive Officer

**Permit Holders L44/43**

Pan Orient Energy (Operator)	60%
<b>Carnarvon Petroleum</b>	<b>40%</b>



*Figure 1: Approximate location of contingent resource areas in Thailand L44/43 concession.*