

# Thailand Reserves Update



7 April 2011

## Carnarvon sees increasing sandstone reservoirs in Thai Concessions

- WBExt field 2P reserves additions 5.5 million barrels plus L33 field 2P reserves additions 1.9 million barrels
- Na Sanun East (NSE) Central and NSE-F1 fields 2P reserves revised by 10.3 million barrels
- Proved and probable reserves at Carnarvon's Thailand concessions total 20.4 million barrels
- Reserve estimate shows increasing proportion of conventional sandstone reservoirs
- GCA's values reserves at \$0.45 per Carnarvon share on 2P reserve basis
- Joint venture committed to 34-well drill program in 2011

Oil and gas producer Carnarvon Petroleum (**ASX: CVN, Carnarvon**) is pleased to announce the results of an independent reserves evaluation of its Thailand concessions as at 31 December 2010.

Carnarvon has a 40% equity interest in the SW1, L33/43 and L44/43 on-shore concessions (Pan Orient Energy Corp. 60%). The reserves estimates data has been certified by international energy consultants Gaffney, Cline and Associates ("GCA").

At the end of the calendar year, proved and probable reserves at Carnarvon's Thailand concessions totaled 20.4 million barrels. This comprised proved reserves of 4.7 million barrels plus probable reserves of 15.7 million barrels.

The estimates include new oil field discoveries in 2010 in the Wichian Buri Extension (WBExt) field within the L44/43 concession and the L33 field in the L33/43 concession. The increase in reserves in these fields was offset by a downward revision of previously announced reserves in the NSE Central and NSE-F1 fields within the L44/43 concession. Carnarvon indicated the potential for the downward revision at these two reservoirs in October 2010.

The net present value of proved and probable reserves after tax for the three concessions in Thailand, using forecast oil prices and discounted at 10%, is A\$307 million, representing A\$0.45 per Carnarvon share, based on the current 687.8 million shares outstanding and an exchange rate of A\$1.00 / US\$1.04.

Further information in relation to GCA's reserves estimates is outlined below.

### CEO Comment

Carnarvon CEO Ted Jacobson said: "These reserves estimates provide us with a much better understanding of this series of oil fields and give us greater confidence in the assessment of remaining oil.

"These are important assets for Carnarvon; they provides us with important cash flow and exploration and appraisal upside whilst enabling us to continuing to focus on upside via exploration and acquisitions in other regions.

"While we expected the revisions in reserves for the NSE Central and NSE-F1 reservoirs, the greater percentage of more conventional sandstone reservoirs means a longer, more consistent and predictable production for Carnarvon moving forward once these sandstone reservoirs have been fully developed.

"We have a long future in this range of assets and are excited about the broader opportunities for Carnarvon that the long term positive cash flows can achieve," said Mr Jacobson.

## Reserves Composition

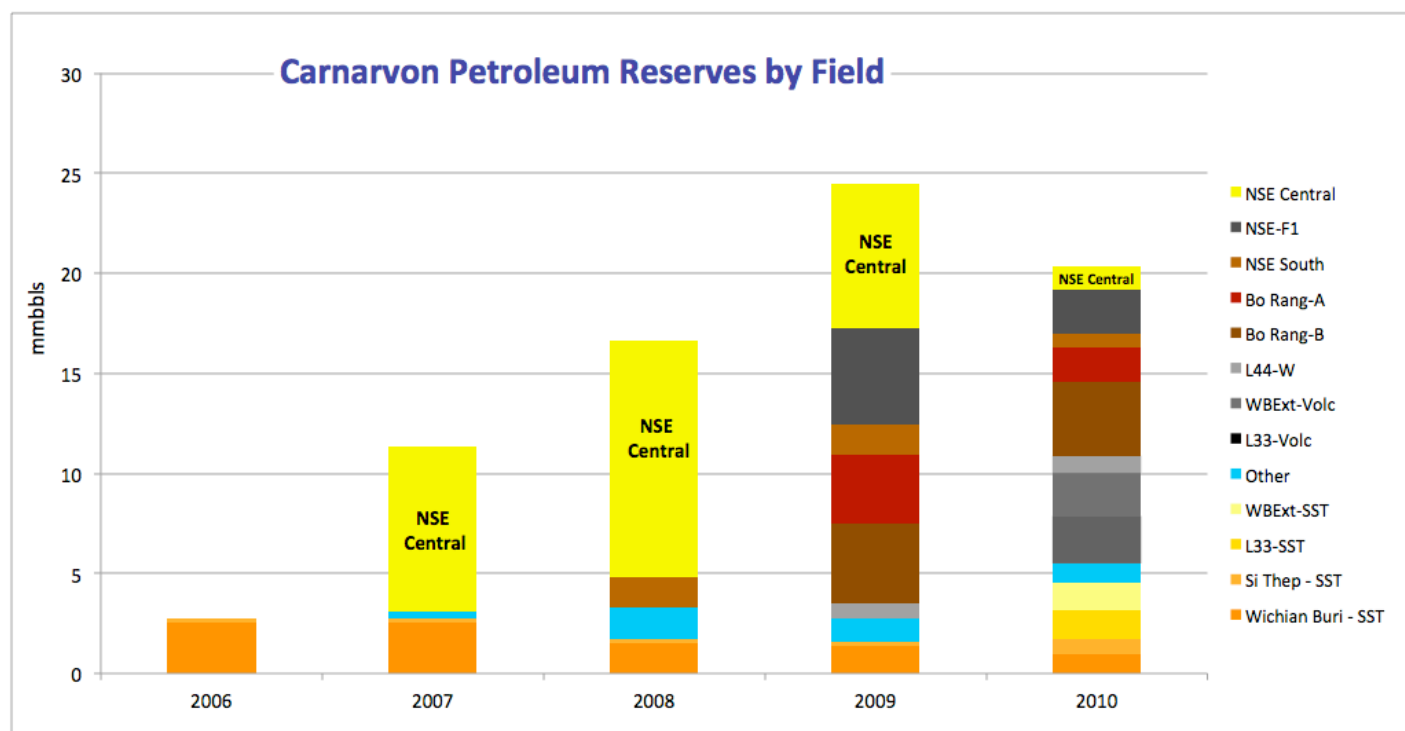


Table 1 – Reserves Summary showing the current spread of reserves more evenly distributed among the 12 major producing fields.

## Reserves Analysis

The reserves evaluation was conducted by GCA for the Thailand assets and was prepared in accordance with National Instrument 51-101 Standards of Disclosure for Oil and Gas Activities for the operator, Pan Orient Energy Corp. (POE – TSXV).

Crude oil reserves in Thailand at 31 December 2010 have been assigned to the three on-shore concessions in Thailand, being Concession SW1, Concession L44/43 and Concession L33/43 where Carnarvon has a 40% working interest.

### Thailand Reserves Summary and Highlights (reserves quoted are net to Carnarvon):

- Proved plus probable reserves of 20.4 million barrels at 31 December 2010, a 17% decrease from 24.5 million barrels at 31 December 2009. Reserves at 31 December 2010 include new oil field discoveries in 2010 at the Wichian Buri Extension field (“WBExt”) in Concessions L44/43 & L33/43 and the L33 field in Concession L33/43 offset by a downward revision of previously assigned reserves mainly at the Na Sanun Central and NSE-F1 fields in Concession L44/43.
- Thailand proved plus probable crude oil reserves at 31 December 2010 reflect the following:
  - Discovery in 2010 of the WBEXT field in Concessions L44/43 & L33/43 with oil sales commencing in August 2010 and 5.5 million barrels of proved and probable reserves assigned at year-end.
  - Discovery in 2010 of the L33 field in Concession L33/43 with oil sales commencing in November 2010 and 1.9 million barrels of proved and probable reserves assigned at year-end.
  - Downward reserve revisions to proved and probable reserves, mainly at Na Sanun East Central and NSE-F1 fields in Concession L44/43, were 10.5 million barrels at 31 December 2010. This downward revision was the result of lower than expected production performance related mainly to a higher than initially estimated oil / water contact throughout the Na Sanun East Central and NSE-F1 fields and a natural gas cap in the eastern portion of the NSE-F1 field.

Summary of Thailand Crude Oil Reserves as of 31 December 2010, as provided by Gaffney Cline  
(net to Carnarvon)

Marketable Reserves – Company Gross (thousands of barrels)	Carnarvon
Proved	4,737
Probable	15,618
Total Proved plus Probable	20,355
Possible	31,543
Total Proved plus Probable plus Possible	51,898

Summary of Thailand Crude Oil Proved plus Probable Reserves as of 31 December 2010, by Major  
Field as provided by Gaffney Cline (thousands of barrels net to Carnarvon)

Concession	Major Field	Net Proved	Net Probable	Net Proved plus Probable
L44/43	Na Sanun East (incl. NSE-F1)	1,367	3,530	4,897
	Bo Rang North	1,995	4,247	6,241
	Wichian Buri Extension (portion in L44)	1,063	2,489	3,551
	Various fields	22	1,287	1,309
L33/43	L33 Field	149	1,709	1,858
	Wichian Buri Extension (portion in L33)	-	1,908	1,908
SW1	Various fields	141	449	591
		4,737	15,618	20,355

Summary of Thailand Net Present Values as of 31 December 2010, as provided by Gaffney Cline (After  
Income Tax net to Carnarvon)

Present Value - After Tax (A\$ million)	Undiscounted	5%	10%	15%
Proved	140	118	102	89
Probable	382	275	205	160
Total Proved plus Probable	522	393	307	249
Per Carnarvon share (Note 5&8)	\$ 0.76	\$ 0.57	\$ 0.45	\$ 0.36

Notes:

- 1) Thailand reserves and values shown represent Carnarvon's 40% working interest for Concessions SW1, L44/43 & L33/43.
- 2) The tables shown have assessed reserves at forecast crude oil reference prices & costs.
- 3) The reference price for crude oil per barrel (US\$ WTI per barrel) is \$88.40 for 2011, \$89.14 for 2012, \$88.77 for 2013, \$88.88 for 2014, \$90.22 for 2015, and prices increase at 1.5% per year thereafter.
- 4) Oil revenue for these reserves is equal to approximately 88% of the forecast crude oil reference price.
- 5) Tables shown assessed reserves with a foreign exchange rate of A\$1=US\$1.04
- 6) The inflation rate starting in 2011 is 2.0% per year.
- 7) Estimated future undiscounted development costs at December 31, 2010 were A\$22 million for proved reserves and A\$50 million for proved plus probable reserves.
- 8) Per share values were calculated based on 687.8 million Carnarvon shares outstanding at 1 April 2011.
- 9) Net present values after income tax are after deduction of the SRB (Special Remuneratory Benefit tax) and income tax in Thailand.
- 10) The engineered values disclosed may not represent fair market value.
- 11) Totals may not add exactly due to rounding.

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**Competent Persons Statement**

*This ASX release contains information on Carnarvon's Reserves which have been compiled by Mr Philip Huizenga, who is a full time employee of Carnarvon, is qualified in accordance with ASX listing rule 5.11 and has consented to the inclusion of this information in the form and context in which it appears.*

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