Reserves Update

22 March 2012

CARNARVON PETROLEUM LTD

Carnarvon Petroleum Limited (“Carnarvon”) (ASX:CVN) provides the following update on its reserves position and potential valuation following the release of an updated independently certified reserves statement from Gaffney, Cline and Associates (“GCA”). Oil reserves in Thailand at December 31, 2011 have been assigned to Carnarvon’s three on-shore concessions in Thailand, being Concession SW1, Concession L44/43, and Concession L33/43 where it has a 40% working interest.

1. Proved Reserves (“1P”) of 3.8 million barrels (2010: 4.7 million barrels) valued at US$84 million after tax by GCA on NPV_{10} basis, equivalent to A$0.12 per CVN share. Proved Reserves were determined on the basis of the joint venture completing the current 2012 approved Work Program and Budget (“WP & B”) the revision also accounts for production in 2011 of over 400,000 barrels;
2. Proved plus Probable Reserves (“2P”) position of 12.1 million barrels (2010: 20.4 million barrels) provides considerable upside valuation of US$222 million after tax, equivalent to A$0.32 per CVN share, based on a multi-year work program;

In addition to the value identified by GCA in the reserves report, further upside is identified from:

3. Carnarvon’s world class Phoenix assets, offshore Western Australia; and
4. Exploration potential in Carnarvon’s focused portfolio in south east Asia and Australia.

1. Proved Reserves of 3.8 million barrels (net to CVN)

Carnarvon’s net Proved Reserves (“1P”) of 3.8 million barrels represents a Net Present Value (“NPV”) at 10% discount rate of US$84 million and is based on a work program of approximately 28 development wells at a budget of $11 million (net to CVN). Approximately 85% of these wells are planned for 2012 and incorporate the bulk of the L33/43 and L44/43 Concession 2012 drilling program.

In particular, the 2012 drilling program is targeting the development of the sandstones in the WBEXT fields. The timing of this development is dependent on environmental approvals and the targeted production level for 2012 is around 1,500 bopd net to Carnarvon.

According to GCA calculations, this valuation is based on maximum net sales to Carnarvon in the 2012 to 2014 calendar years of 500,000 to 600,000 bbls of oil, and declining thereafter. Furthermore, GCA anticipate a field life in excess of 15 years.

As noted in previous operations updates and the most recent quarterly report, drilling results and well performances throughout 2011 were below expectations resulting in several fields having their expected ultimate recovery revised downwards. Along with the technical revisions, the decrease in Proved Reserves is also due to production in 2011 of over 400,000 barrels of crude oil.

Notwithstanding that the reassessment of oil in place and recovery factor have resulted in a reduction in reserves, Carnarvon has a very active appraisal and development drilling campaign planned for 2012 with the objective of increasing production levels.

2. Proved plus Probable Reserves of 12.1 million barrels (net to CVN)

Carnarvon's net Proved plus Probable Reserves ("2P") of 12.1 million barrels represents an NPV at 10% discount rate of US$222 million and is based on approximately 90 development wells at an indicative budget of $100 million (net to CVN). While the planning for these wells is across the 2012 to 2015 calendar years, there is as yet no definitive development plan beyond the 2012 WP & B.

The timing of development is dependent on several factors including environmental approvals, joint venture and government approvals and availability of equipment such as drilling rigs.

Forecast production rates are similar to the 1P case for 2012 and increasing to a maximum net to Carnarvon of 3,500 to 4,000 bopd in the 2013 to 2016 time frames. Note that these rates were achieved previously, specifically in 2008, 2009 and 2010.

The future implementation of technological advances, such as the Inflow Control Devices currently being trialled, will assist in the joint venture achieving GCA predicted net sales to Carnarvon in the 2013 to 2017 calendar years of 1 to 1.5 million bbls of oil per annum, and declining thereafter.

There are numerous uncertainties inherent in estimating reserves and resources, and in projecting future production, development expenditures, operating expenses and cash flows. Oil and gas reserve engineering and resource assessment must be recognised as a subjective process of estimating subsurface accumulations of oil and gas that cannot be measured in an exact way, and this is particularly so for the volcanic reservoirs encountered in this area.

3. Phoenix Assets

The "Phoenix" asset refers to the WA-435-P and WA-437-P exploration permits, offshore Western Australia, which contain the gas discovered in the Phoenix-1 and Phoenix-2 wells and significant exploration prospects at Roc and Phoenix South.

A new 1,100km^2 3D seismic program was acquired in 2009 / 2010 and has been technically assessed and prepared for farm-out. The technical work undertaken since the acquisition of the new 3D data not only supports the significant size of the previously mapped gas prospects but has also led to the assessment of several new leads in the two permits.

Carnarvon estimates prospective resources in the two blocks to be multiple trillion cubic feet of gas recoverable. Based on nominal value metrics, a resource of this magnitude would have a value in the range of several billion dollars upon commercial flow rates of gas being proven. Even taking into account post-farmout dilution, which is planned to enable Carnarvon to drill these prospects at no cost, the nominal value to Carnarvon is significantly higher than the current market capitalization of the company.

4. Exploration Upside

Carnarvon has a range of assets, aside from those listed above, that are in various stages of exploration. Summarizing the potential of these exploration assets:

Permit	Equity	Indicative Forward Program (2012-2013)	Prospects and Leads *
Thailand			
SW1A, L33/43 and L44/43	40%	5-10 Appraisal and Exploration Wells	Possible Reserves of 11 MM bbls Prospective Resources of 48 MM bbls
L20/50	55%	3D Seismic 1-2 Exploration Wells	Prospective Resources of 20 MM bbls (Chalawan lead plus others)
L52/50 & L53/50	50%	Seismic Interpretation 1-2 Exploration Wells	Prospective Resources to be calculated (Leads A through E)
Australia			
WA-435-P & WA-437-P	50%	Interpretation, Farmout	Prospective Resources to be calculated (Bewdy and Bottler Leads)
WA-436-P & WA-438-P	50%	3D Seismic License and Interpretation Farmout	Prospective Resources to be calculated (Manilya and Bandy)
WA-443-P	100%	3D Seismic License and Interpretation Farmout	Prospective Resources to be calculated (Salamander and Jaubert)
WA399P	13%	3D Seismic Interpretation Contingent Exploration Well	Prospective Resources to be calculated (Stratigraphic Trap Lead A)

* Net to CVN; Unrisked

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Yours faithfully

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This news release contains forward-looking information. Forward-looking information is generally identifiable by the terminology used, such as "expect", "believe", "estimate", "should", "anticipate" and "potential" or other similar wording. Forward-looking information in this news release includes, but is not limited to, references to: well drilling programs and drilling plans, estimates of reserves and potentially recoverable resources, and information on future production and project start-ups. By their very nature, the forward-looking statements contained in this news release require Carnarvon and its management to make assumptions that may not materialize or that may not be accurate. The forward-looking information contained in this news release is subject to known and unknown risks and uncertainties and other factors, which could cause actual results, expectations, achievements or performance to differ materially, including without limitation: imprecision of reserve estimates and estimates of recoverable quantities of oil, changes in project schedules, operating and reservoir performance, the effects of weather and climate change, the results of exploration and development drilling and related activities, demand for oil and gas, commercial negotiations, other technical and economic factors or revisions and other factors, many of which are beyond the control of Carnarvon. Although Carnarvon believes that the expectations reflected in its forward-looking statements are reasonable, it can give no assurances that the expectations of any forward-looking statements will prove to be correct.

CARNARVON PETROLEUM LTD

ANNEXURE 1 – FURTHER ECONOMIC DETAIL FROM GCA RESERVE REPORT

Economic Analysis

GCA undertake economic analyses to determine the Reserves volumes, in accordance with the requirement that Reserves must be commercial.

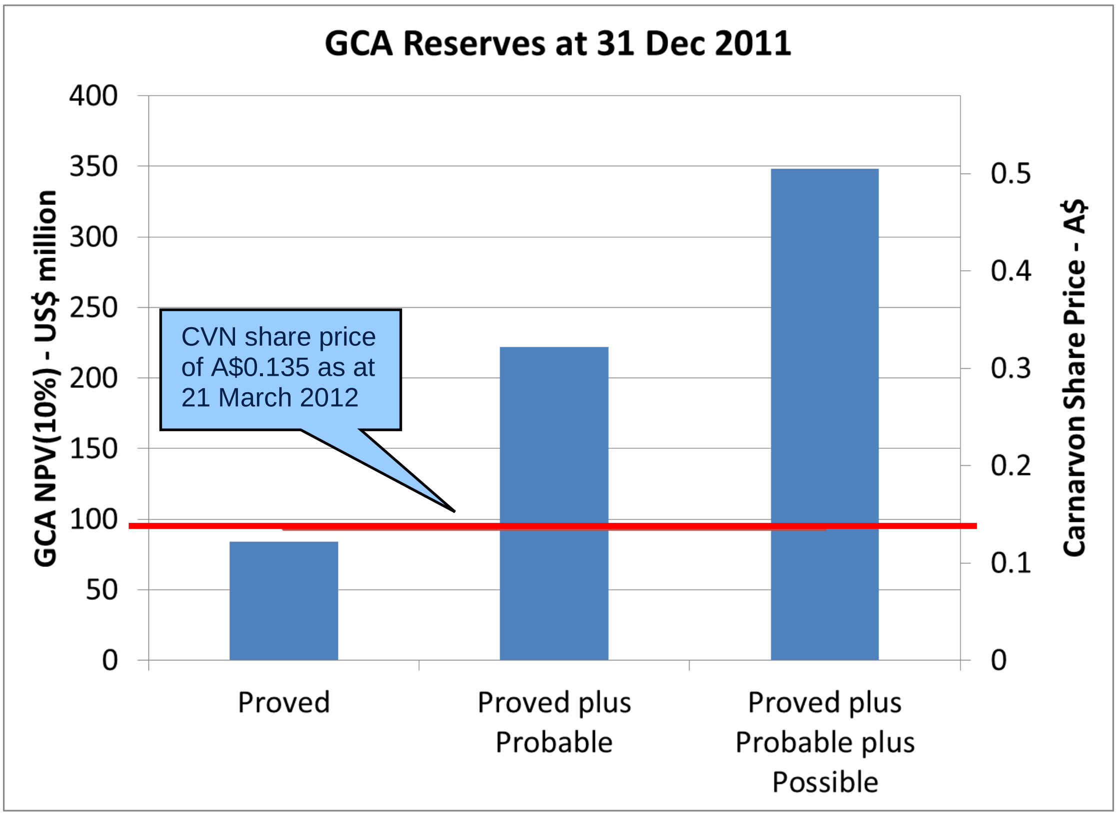
The analysis is based on the Thailand III fiscal regime and using GCA forward oil price scenario adjusted to Na Sanun and Wichian Buri historical prices as per the table below.

Year	Brent	Na Sanun	Wichian Buri
2012	105.61	92.73	92.43
2013	101.36	88.49	88.19
2014	97.23	84.35	84.05
2015	97.41	84.53	84.24
2016	101.42	88.54	88.24
2017	103.37	90.49	90.19
2018 thereafter	Escalated 2.0% p.a.	U.S.$12.88/bbl discount to Brent	U.S.$13.18/bbl discount to Brent

Economic Results

The Net Present Values ("NPVs") are presented in the table below and are summarized graphically in the following chart. NPVs quoted are attributable to Carnarvon's net 40% working interest cash flow in SW1, L44/43 and L33/43, under the terms of the Thailand III Fiscal Term and after the deduction of royalty, SRB and taxes.

	CVN Net NPV; US$ Million				
Nominal Discount Rate	0%	5%	10%	15%	20%
Proved Reserves	127.8	101.3	83.9	72.0	63.1
Proved plus Probable	390.4	287.1	222.1	178.7	148.2
Proved plus Probable plus Possible	676.9	471.1	348.3	270.1	217.2



ANNEXURE 2 – FURTHER TECHNICAL DETAIL FROM GCA RESERVE REPORT

Independent Reserves Assessment

GCA have provided a revised technical review of the Reserves of the SW1A, L44/43 and L33/43 Concessions in the Phetchabun Basin as of end 31st December 2011. The reserves categorization is consistent with the definitions for reserves set out in the Petroleum Resources Management System approved by the Society of Petroleum Engineers, the World Petroleum Council, the American Association of Petroleum Geologists and the Society of Petroleum Evaluation Engineers in March 2007.

For the purpose of reviewing these Reserves, GCA served as an independent reserves estimator.

This report is based on information which has been compiled by the Company's Chief Operating Officer, Mr Philip Huizenga, who is a full-time employee of the Company. Mr Huizenga is qualified in accordance with ASX Listing Rule 5.11 and has consented to the form and context in which this statement appears.

Revision Summary

The Joint Venture was very active during 2011, with further development drilling completed in the Na Sanun East and Bo Rang areas. In addition, recent improved drilling success in the Na Sanun East "F" area, where well NSE-F6, drilled in September, 2011, recorded the highest initial production rate for the field of 1,000 bopd, prompted further development with three additional wells being drilled there before the end of the year.

The Company has also had very encouraging results from a new down-hole completion technique, the inflow control device, or ICD, installed in two wells in November and December, which successfully reduced water cut and improved oil production rates. The intention is to complete all future wells with ICD’s and to work-over 30 or so existing high water cut wells in 2012. It is believed this may improve oil recovery in areas such as the NSE Central and Bo Rang, where reserves were written down in 2010 due to rapid water cut development. With relatively little production data from the horizontal wells and ICD’s at the time of the reserves assessment, it is difficult to quantify the effect on recovery factors. Improved well performance and reduced decline rates have been taken into consideration and it is assumed that Low Case recovery factors will generally remain the same but will require fewer wells to be drilled instead.

Overall though, well performance during 2011 was significantly below expectation and consequently several fields have had their Expected Ultimate Recovery revised with reductions in the Recovery Factors and, in some cases, by a reassessment of the oil in place, especially where several appraisal wells have been drilled in 2011. The drilling of the volcanic reservoir in WBEXT and L33-2 areas for instance has been particularly disappointing compared to the initial discoveries. Reserves for these and other major fields, i.e., Bo Rang North and L44W, which had very high rates initially, have been reduced, reflecting the subsequent poor performance of new wells and high water cuts being experienced in existing producers.

The Proved plus Probable (2P) and Proved plus Probable plus Possible (3P) Reserves as at 31 December 2011 for the SW1, L44/43 and L33/43 concessions are thus considerably reduced compared to last year.

The Joint Venture also has a very active appraisal and development drilling campaign for 2012, with 31 wells planned; with the objective of increasing production levels from the L33/43 and L44/43 concessions. In particular, the Company intends drilling 17 development wells targeting the sandstone reservoirs in the WBEXT area. This development, originally scheduled for 2011, has been postponed until early 2012, when it is expected that Environmental Impact Assessment approvals for the proposed well locations will be granted.

The results of GCA’s assessment for each Concession are presented in Table 1 on a net working interest basis.

Statement of net crude oil Reserves
Petchabun Concession Area
as of 31st December 2011
(MM STB)

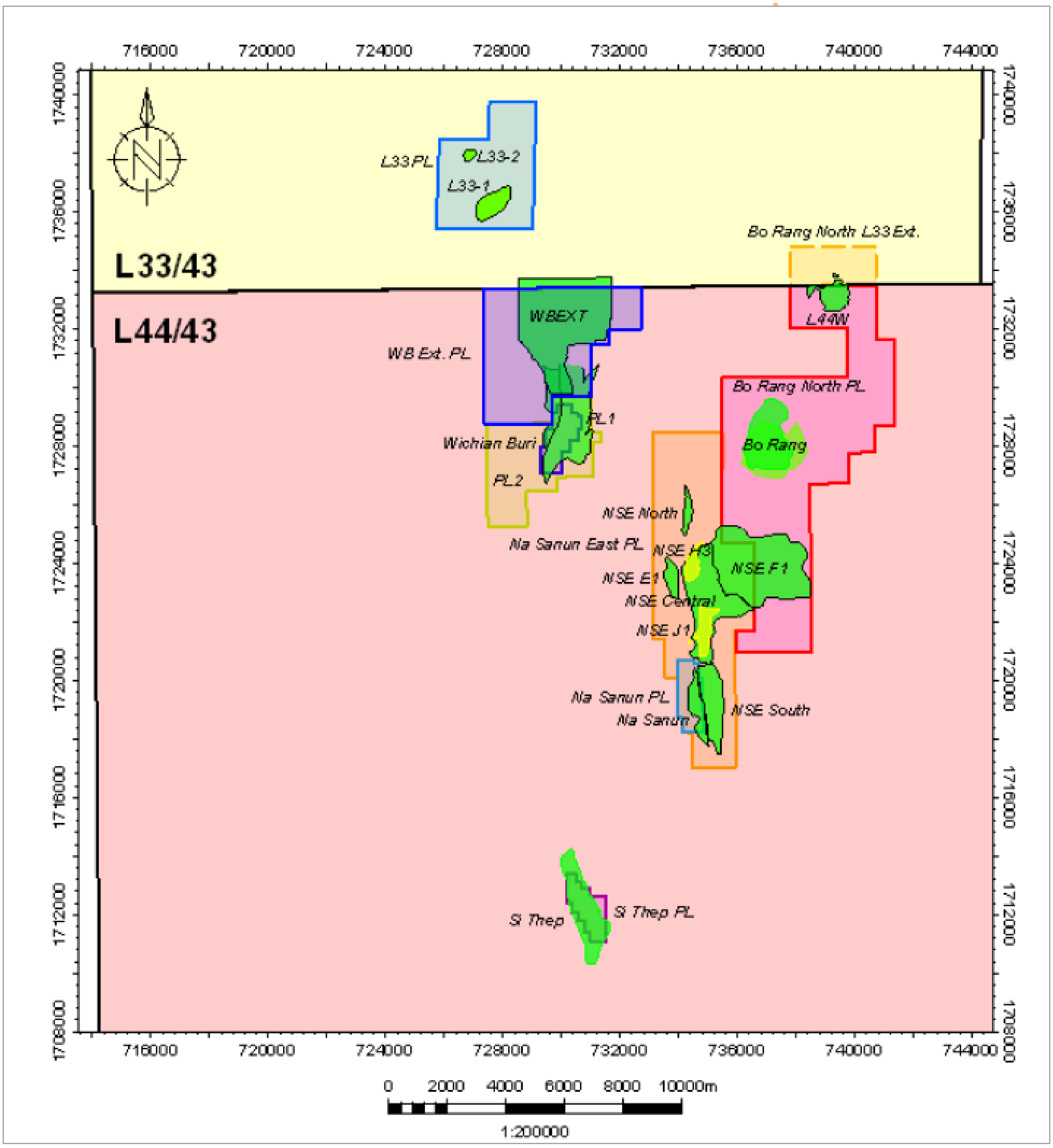
Concession	Major Fields / Reservoirs	Proved	Proved plus Probable	Proved plus Probable plus Possible
SW1A				
Wichian Buri	W. Buri & POE-6	0.1	0.2	0.3
	Na Sanun	0.0	0.1	0.1
	Si Thep	0.0	0.1	0.1
Sub Total		0.1	0.4	0.5

Concession	Major Fields / Reservoirs	Proved	Proved plus Probable	Proved plus Probable plus Possible
L44/43				
Wichian Buri	W. Buri & POE-6	0.1	0.1	0.6
	Na Sanun	0.0	0.0	0.0
	Si Thep	-	-	0.3
Na Sanun East	Central	0.3	0.8	1.3
	North		0.0	0.1
	South	0.1	0.7	1.4
	NSE E1	0.0	0.2	0.7
	NSE F1	0.7	1.6	2.8
	NSE J1	0.0	0.0	0.1
	NSE H3		0.0	0.0
Bo Rang North	Bo Rang Volc B	0.9	2.1	3.1
	Bo Rang Volc A	0.6	1.4	1.9
	L44W	0.1	0.4	0.7
WBEXT	WBV-1	0.0	0.3	0.8
	WBV-2	0.1	0.6	0.9
	D and E Sands	0.3	1.3	3.7
Sub Total		3.3	10.5	18.7

Concession	Major Fields / Reservoirs	Proved	Proved plus Probable	Proved plus Probable plus Possible
L33/43				
L33 Field	L33	0.1	0.1	0.4
WBEXT	WBV-2	-	0.2	0.6
	D and E Sands	-	0.1	0.4
Sub Total		0.1	0.4	1.3

Total		**3.8**	**12.1**	**22.7**

ANNEXURE 3 – PHETCHABUN CONCESSIONS, LICENCES & MAJOR FIELDS



Phetchabun Concessions, Licences and Major Fields