Thailand Estimate of Contingent & Prospective Resources and Operations Update 3 November 2010



Carnarvon Petroleum Ltd. ("Carnarvon") (ASX:CVN) is pleased to provide the results of an independent estimate of contingent and prospective resources related to the applications for two production licenses encompassing recent crude oil discoveries onshore Thailand. The Production Area Applications ("PAA") cover the Wichian Buri Extension Field ("WBEXT") in Concession L44/43 and the L33-1 / L33-2 fields in Concession L33/43.

Carnarvon also provides an update on the operations in Thailand.

Highlights

PAA have been applied for covering the recent discoveries in the L44 concession at WBExt and L33 concession at L33-1&2.

It is anticipated the L33 PAA will be approved, the two shut-in wells will be producing, by December 2010.

Contingent resources assigned to the WBV1 and WBV2 volcanic reservoirs and the F sandstone reservoir in Concessions L44 and L33 net to Carnarvon's 40% operated working interest is 10.3 million barrels recoverable at a best estimated confidence level within the PAA.

Prospective resources assigned to the WBV1 and WBV2 volcanic reservoirs in Concessions L44 and L33 net to Carnarvon's 40% operated working interest is 4.5 million barrels recoverable within the PAA.

The WBExt-2 well, previously flowing gas, has been sidetracked and testing is about to commence across a prospective volcanic section and the overlying shale.

A further well (WBExt-1C) will be drilled into the WBV1 volcanic targeting the same section as currently producing from WBExt-1 at a rate of 3,500 BOPD.

Two production area applications applied for with Thailand's DMF for an area of 18.5 km² over WBExt in L44/43 and an area of 12.02 km² over L33-1&2 in L33/43.

Contingent resources within the production area applications total 10.3 million barrels net to CVN at the 2C confidence levels.

Further prospective resources within undrilled fault blocks total 4.5 million barrels net to CVN at the best estimate level.

Previous gas well WBEXT2ST2 deepened into prospective zone in WBV1 volcanic and testing to commence

Drilling of WBEXT-C to commence

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Contingent & Prospective Resource Estimates

The estimates of contingent and prospective resources have been conducted by Gaffney Cline & Associates-Singapore ("GCA") and have been prepared as part of two production license area applications submitted to the Thailand Department of Mineral Fuels ("DMF") incorporating drilling results and production data to October 28, 2010.

Contingent resource volumes estimated in these GCA reports are contingent on the Operator of the permits, Pan Orient, receiving approval for the two production license area applications as submitted to the DMF. Pan Orient has no reason to believe these two production license applications will not be approved by the DMF and anticipates each production license application to be approved within approximately 90 days from the date of submission.

The extent of the crude oil accumulations in the reservoirs set out in these estimates of contingent and prospective resources, and associated production levels, will not be known until after additional appraisal drilling, production testing, defining the oil / water contacts and defining the oil / gas contacts.

The full extent of the conversion of GCA's estimates of contingent and prospective resources provided here, into reserves will be dependent mainly upon:

- 1) the approval of the two proposed production licenses by the DMF, and
- 2) the results of further drilling and production performance at the WBEXT, L33-1, and L33-2 crude oil accumulations between now and year-end 2010.

In the GCA contingent and prospective resource evaluation for the WBEXT field, no resources of any classification were assigned to what are interpreted to be material portions of the WBEXT fault compartments at the WBV1 and WBV2 volcanic reservoir levels that extend into Concession L33 as these were beyond the scope of the current production license area applications. No well has been drilled to date on WBEXT field fault compartments extensions into Concession L33, and under DMF regulations the application for a production license over these areas in Concession L33 is not permitted until such a well has been drilled. Drilling pad WBEXT-4 is currently under construction approximately 300 metres south of the boundary between Concession L44 and Concession L33 from which a number of wells are proposed for late 2010 or early 2011 to test the WBV1 and WBV2 volcanic reservoirs at a subsurface target location within Concession L33.

The Company is expecting that for the 2010 year-end reserve evaluation, reserve additions from the recent field discoveries at WBEXT, L33-1, and L33-2 will more than offset the expected negative reserve reclassifications or revisions of proved and probable crude oil reserves at the NSE-F1 and NSE Central fields.

Contingent & Prospective Resource Estimates for WBEXT Field in Concession L44 (CVN 40% Working Interest non Operator)

Oil production may be sold from wells in Concession L44 under a 90 day production test approval before a new production license is granted since there has been previous commercial production to date from this concession, and a point of sale within Concession L44 has been established previously by a production license. At the end of this 90 day test period, the well must be shut in until a production license is granted by the Government of Thailand.



Statement of Crude Oil Contingent Resource Volumes Wichian Buri Extension (WBEXT) Discoveries, Onshore Thailand L44/43 Concession Area Attributable to the Proposed 18.5 km² Production License

As of September 30, 2010 provided by Gaffney, Cline & Associates

Carnarvon 40% (MMSTB)

	Low Estimate "1C"	Best Estimate "2C"	High Estimate "3C"
F Sand Reservoir	0.5	1.5	3.6
WBV1 Volcanic Reservoir	1.3	6.3	9.6
WBV2 Volcanic Reservoir	0.1	0.9	2.0
Proposed 18.5 km ² Production License	1.8	8.7	15.3

- 1 Volumes reflect 40% working interest of Carnarvon in the L44/43 Concession.
- 2 Contingent Resources are sub-classified under the "Development Pending" category of project maturity.
- 3 Resources are contingent on Carnarvon receiving the proposed 18.5 km² production license.
- 4 Volumes are for the proposed production license only and exclude potential Contingent Resources in L33/43.
- 5 Volumes include royalties due to other parties.
- 6 Totals may not sum precisely due to rounding.

Summary of After Tax NPV - Contingent Resources

Wichian Buri Extension (WBEXT) Discoveries, Onshore Thailand L44/43 Concession Area Attributable to the Proposed 18. 5 km² Production License as of September 30, 2010 As of September 30, 2010 provided by Gaffney, Cline & Associates

Carnarvon 40% (US\$ million)

	<u>0%</u>	<u>5%</u>	<u>10%</u>	<u>15%</u>	<u>20%</u>
Contingent - Low Estimate "1C"	54	47	41	37	34
Contingent - Best Estimate "2C"	225	177	143	119	101
Contingent - High Estimate "3C"	339	259	205	168	141

- 1 Resources assessed at forecast crude oil reference prices and costs.
- The reference price for crude oil per barrel (US\$ WTI per barrel) is \$80.00 for 2010, \$83.60 for 2011, \$87.40 for 2012, \$91.30 for 2013, \$95.30 for 2014, \$99.40 for 2015, and prices increase at 2% per year thereafter.
- 3 Oil revenue for these resources is equal to 89.3% of the forecast crude oil reference price.
- 4 Future development costs of the proposed production license area for Contingent Resources which have been deducted in calculating the after tax NPV:
 - Low Estimate US\$10.2 million with the drilling of 16 gross wells
 - Best Estimate US\$12.9 million with the drilling of gross 34 wells
 - High Estimate US\$20.7 million with the drilling of gross 43 wells
- 5 Results are contingent on Carnarvon receiving the proposed 18.5 km² production license.
- 6 The engineered values disclosed may not represent fair market value.



Statement of Crude Oil Prospective Resource Volumes Wichian Buri Extension (WBEXT) Discoveries, Onshore Thailand L44/43 Concession Area Attributable to the Proposed 18. 5 km² Production License as of September 30. 2010

Carnaryon 40% (MMSTB)

Carnaryon 40% (MMS1B)					
	Low Estimate	Best Estimate	High Estimate		
WBV1 Volcanic Reservoir	0.4	3.6	7.7		
WBV2 Volcanic Reservoir	0.0	0.2	0.5		
Proposed 18. 5 km ² Production License 0.4 3.9 8.2					
 Volumes reflect 40% working interest of Prospective Resources are sub-classif The geological chance of success is es Volumes are for the proposed production 	ied under the "Pros stimated to be 50%	spect" category of pr	oject maturity.		

- Resources elsewhere in L44/43 and L33/43. Volumes include royalties due to other parties.
- 6 Totals may not sum precisely due to rounding.
- 7 Economics were not prepared for Prospective Resources

Contingent & Prospective Resource Estimates for the L33-1 / L33-2 Fields in Concession L33 (CVN 40% Working Interest non Operator)

Until a production license is approved by the DMF no production may be sold from wells in the L33-1 / L33-2 fields of Concession L33 since there has been no commercial production to date from this concession, and a point of sale within the concession has not been established by a production license. After receipt of a production license, the L33-1 and L33-2 wells will be placed on production, crude produced during the testing period will be sold, and it is anticipated that further appraisal wells will be drilled. The L33-1 and L33-2 production license application was submitted to the DMF in the first week of September 2010.

Statement of Crude Oil Contingent Resource Volumes L33-1 & L33-2 Discoveries, Onshore Thailand L33/43 Concession Area As of August 31, 2010 provided by Gaffney, Cline & Associates Carparyon 40% (MMSTR)

Camaryon 40% (MINISTB)						
	Low Estimate "1C"	Best Estimate "2C"	High Estimate "3C"			
L33-1 Volcanic Reservoir	0.0	0.1	0.7			
L33-2 Volcanic Reservoir	0.1	1.4	7.1			
Proposed 12.02 km ² Production License	0.1	1.6	7.8			

- 1 Volumes reflect 40% working interest of Carnarvon in the L33/43 Concession.
- 2 Volumes include royalties due to other parties.
- 3 Contingent Resources are sub-classified under the "Development Pending" category of project maturity.
- 4 Resources are contingent on Carnarvon receiving the proposed 12.02 km² production license.
- 5 Totals may not sum precisely due to rounding.



Summary of After Tax NPV - Contingent Resources

L33-1 & L33-2 Discoveries, Onshore Thailand L33/43 Concession Area Attributable to the Proposed 12.02 km² Production License as of August 31, 2010 As of August 31, 2010 provided by Gaffney, Cline & Associates

Carnaryon 40% (US\$ million)

	0%	<u>5%</u>	<u>10%</u>	<u>15%</u>	20%
Contingent - Low Estimate "1C"	3	3	3	3	3
Contingent - Best Estimate "2C"	47	43	39	37	35
Contingent - High Estimate "3C"	221	167	133	109	93

- 1 Resources assessed at forecast crude oil reference prices and costs.
- 2 The reference price for crude oil per barrel (US\$ WTI per barrel) is \$80.00 for 2011, \$83.60 for 2012, \$87.40 for 2013, \$91.30 for 2014, \$95.30 for 2015, \$99.40 for 2016, and prices increase at 2% per year thereafter.
- 3 Oil revenue for these resources is equal to 89.3% of the forecast crude oil reference price.
- 4 Future development costs of the proposed production license area for Contingent Resources which have been deducted in calculating the after tax NPV:
 - Low Estimate US\$0.4 million for facilities in 2011
 - Best Estimate three gross wells in the L33-2 structure with a development cost of US\$1.4 million plus facilities of US\$0.8 million in 2011
 - High Estimate 12 gross wells with a development cost of US\$6.3 million plus facilities of US\$5.6 million during the period 2011 to 2015
- 5 Results are contingent on Carnarvon receiving the proposed 12.02 km² production license.
- 6 The engineered values disclosed may not represent fair market value.

Statement of Crude Oil Prospective Resource Volumes

L33-1 & L33-2 Discoveries, Onshore Thailand L33/43 Concession Area Attributable to the Proposed 12.02 km² Production License as of August 31, 2010 As of August 31, 2010 provided by Gaffney, Cline & Associates

Carnarvon 40% (MMSTB)

	Low Estimate	Best Estimate	High Estimate
L33-2 Volcanic Reservoir - Undrilled			
volcanic structure east of L33-2	0.1	0.7	4.3

- 1 Volumes reflect 40% working interest of Carnarvon in the L33/43 Concession.
- 2 Volumes include royalties due to other parties.
- 3 Prospective Resources are sub-classified under the "Prospect" category of project maturity.
- 4 Resources are contingent on Carnarvon receiving the proposed 12.02 km² Production License.
- 5 Economics were not prepared for prospective resources

Thailand Operations Update Concession L44 Wichian Buri Extension Field (CVN 40% Working Interest non Operator)

WBEXT-2/ST1/ST2 Sidetrack Exploration / Appraisal Well (Wichian Buri Extension Field)

The WBEXT-2 well, drilled from the WBEXT-2 pad approximately 1.4 kilometres northwest of the WBEXT-1 pad, encountered the top of the WBV2 target volcanic zone at a true vertical depth of 971 metres, approximately 52 metres high to the top of the WBV2 volcanic zone encountered at the WBEXT-1A well (which flowed at 5,300 BOPD gross from the WBV2 volcanic reservoir). The WBEXT-2 well is located approximately 1.8 kilometres to the east of the WBEXT-2 well at the top WBV2 volcanic reservoir level. The WBEXT-2 well flowed natural gas at a rate of



approximately 1.6 million cubic feet per day through a $\frac{1}{4}$ " choke and with a flowing bottom hole pressure of 1,331 psia with no water on test as press released on September 28, 2010.

The well was deepened to a depth of 1062 metres true vertical depth ("TVD") in an attempt to drill a potential oil leg below the natural gas and also to determine the thickness of the volcanic zone at this location. In total, approximately 52 metres true vertical thickness of volcanic section was drilled with oil shows from 1008 to 1024 metres TVD (to the base of the volcanic). As no mud losses (an indicator of permeability) were observed while drilling the deepened section, the well was immediately side tracked with no further testing of the original hole.

The first sidetrack encountered the target volcanic zone low and resulted in the immediate drilling of a second sidetrack that encountered the top of the WBV2 at a depth of 1,007 metres TVD (approximately 36 metres low to WBEXT-2 and 16 metres high to WBEXT-1A) and penetrated approximately 15 metres true vertical thickness of potential volcanic reservoir with oil shows and drilling fluid losses of approximately 90 barrels per hour. The well also encountered 50 metres of good oil shows and highly elevated mud gas readings while drilling a shale interval directly overlying the WBV2 volcanic. The bottom 16 metres of this interval has been completed open hole to commingle with the underlying WBV2 volcanic during testing.

Testing of the WBEXT-2ST2 well is expected to commence within the next 12 hours and results will be press released at the conclusion of the test.

WBEXT-2A Exploration Well (Wichian Buri Extension Field)

The WBEXT-2A exploration well, drilling from the same surface pad as the WBEXT-2 well, was drilled to a true vertical depth of 1,121 metres encountering the primary WBV3 objective at 1,072 metres TVD and reached 1,121 metres TVD after drilling 49 metres TVD of WBV3 volcanic. No drilling fluid losses were observed while drilling the WBV3 objective and subsequent testing confirmed the WBV3 at this location to be tight with recovery of no fluid.

The well is currently suspended and planned to be sidetracked prior to year end in order to evaluate the WBV3 reservoir at another subsurface location which is interpreted to be fractured.

WBEXT-1C Appraisal Well (Wichian Buri Extension Field)

The WBEXT-1C well is the fourth well to be drilled from the WBEXT-1 drill pad and will target the WBV1 volcanic approximately 200 metres north and approximately 40 metres up dip from the WBEXT-1 discovery well. Drilling is anticipated to commence in the next 24 hours.

The adjacent WBEXT-1 well will be shut-in on November 2, 2010 as required at the completion of its 90 day production test and as outlined in a prior press releases. In the event that WBEXT-1C is successfully tested over the WBV1 volcanic zone, the WBV1 volcanic zone of WBEXT-1 will be abandoned and the WBV1 reservoir will be produced from the more ideal location 40 metres up dip at WBEXT-1C. A new 90 day production test application will be made for WBEXT-1 to test two shallow sands that exhibited strong indication of hydrocarbons while drilling.



Thailand Oil Production

Current production is approximately 7,100 BOPD gross (2,840 BOPD net to CVN) with an additional 3,500 BOPD gross currently shut in at the L33-1 and L33-2 wells in Concession L33 which are awaiting the award of a production license. The decline in production from approximately 12,800 BOPD to 7,100 BOPD gross is due almost entirely to early water incursion (coning) observed at the WBEXT-1A well resulting in the well being choked back to approximately 1000 BOPD from 5,300 BOPD. While disappointing in the short term, the positive economic impact of the WBEXT-1A well to Carnarvon during the first 32 days of production has been considerable with approximately 67,000 barrels of net oil production resulting in \$4.5 million of revenue net to Carnarvon at a well cost of approximately \$1.1 million (including the sidetrack well). Management remains confident in the overall potential of the WBV2 reservoir within the WBEXT structure.

The impact of the water coning at WBEXT-1A was fully incorporated into the contingent and prospective resource estimates by GCA provided in this press release. To mitigate the possibility of future wells seeing early water breakthrough, or "coning", production from any individual well will be limited to 3,500 BOPD or less.

Performance of the WBEXT-1 well continues to be exceptional and is currently producing at 3,500 BOPD gross (1,400 BOPD net to CVN) with a water cut of less than 0.5%. The well has cumulative production of over 116,000 barrels (net to Carnarvon) of oil to date.

There remains some uncertainty with regard to the production level for the remainder of 2010, related mainly to:

- 1) appraisal drilling results from the WBEXT field volcanic reservoirs and overlying sandstone reservoirs, and
- 2) the timing of DMF approval of the production licenses for L33-1 and L33-2 in Concession L33 and the WBEXT field in Concession L44.

Notwithstanding, Carnarvon maintains an annual production target of between 1.0 and 1.5 million bbls of oil net to Carnarvon. Carnarvon anticipates that the L33-1 and L33-2 wells currently shut-in will be on production in December 2010. Further it is expected that current production remains generally stable with the WBEXT-1C well (twin of the WBEXT-1 well) successfully completed as an oil well in the WBV1 reservoir at rates comparable to the currently flowing WBEXT-1 well.

Between now and year end, the six remaining wells that are anticipated to be drilled include:

- a) two appraisal wells at the L33-2 field,
- b) the WBEXT-1C development well,
- c) an exploration sidetrack to WBEXT-2A targeting the same WBV3 deep volcanic, and
- d) two step out appraisal wells at WBEXT-3 targeting multiple undrilled sandstone and volcanic reservoir targets between the Kao Leng-1 well drilled by PetroCorp in the late 1980's that encountered 50 metres of oil stained volcanic but was never tested, and WBEXT-1.

Information regarding the preparation of this reserves statement

The information in these Resource Statements has been compiled by Philip Huizenga, a full-time employee of Carnarvon Petroleum Ltd. Philip Huizenga is qualified in accordance with ASX listing rule 5.11 and has consented to the form and context in which these statements appear.



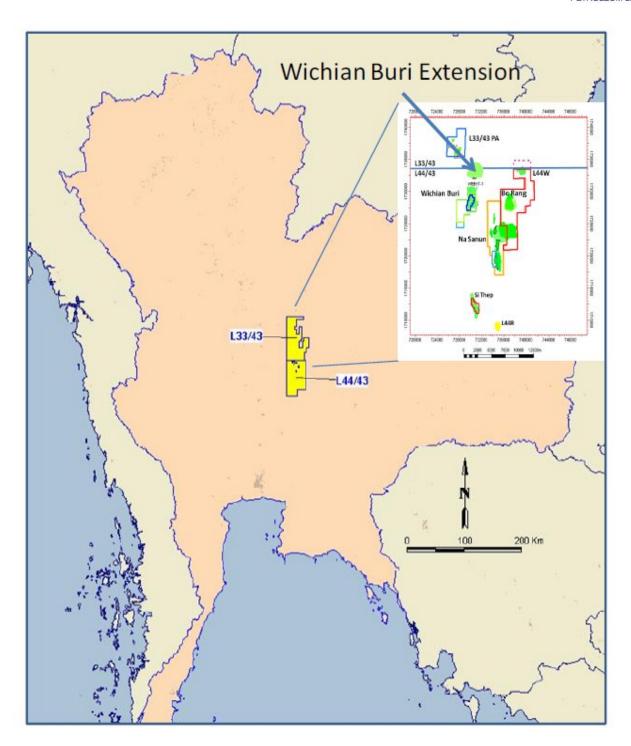


Figure 1: General area of PAA onshore Thailand



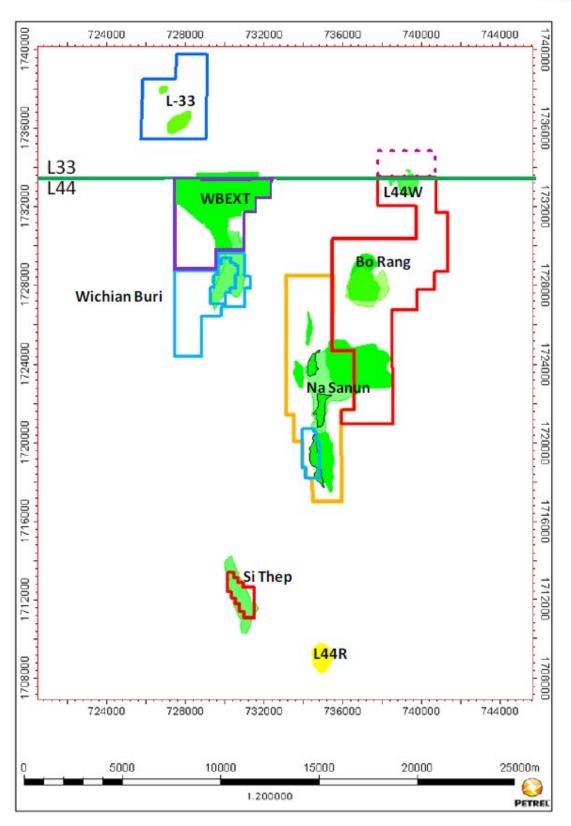


Figure 2: WBExt and L33 PAA locations within Exploration Permits L44/43 and L33/43