

Corporate Presentation

29 September 2011



ASX ANNOUNCEMENT

Carnarvon Petroleum Limited ("Carnarvon") (ASX:CVN) is pleased to provide shareholders with the attached Corporate Presentation given by Mr Philip Huizenga, Carnarvon Chief Operating Officer, at the 16th Asia Week Conference in Singapore, on Thursday 29 September 2011 at 4.00pm.

For this presentation and further information on the Company please visit the CVN website at: www.carnarvon.com.au

For all enquiries please contact:

Adrian Cook
Managing Director - Carnarvon Petroleum
08 9321 2665
Email: admin@cvn.com.au

Yours faithfully

A handwritten signature in black ink, appearing to read "Adrian Cook", written in a cursive style.

Adrian Cook
Managing Director
Carnarvon Petroleum



16th Asia Oil Week Conference

28-30 September 2011, Orchard Hotel Singapore

THAILAND

L20/50 ● ● L33/43 & L44/43

L52 & L53 ●

INDONESIA

Rangkas PSC ●

WA-435-P, WA-436-P, WA-437-P,
WA-438-P & WA-443-P ●

WA-399-P ●

AUSTRALIA

Corporate Office ●

Disclaimer

The information in this document, that relates to oil exploration results and reserves, is based on information compiled by the Company's General Manager (Operations), Mr Philip Huizenga, who is a full-time employee of the Company. Mr Huizenga consents to the inclusion of the reserves and resource statements in the form and context in which they appear.

This presentation contains forward looking statements which involve subjective judgement and analysis and are subject to significant uncertainties, risks and contingencies including those risk factors associated with the oil and gas industry, many of which are outside the control of and may be unknown to Carnarvon Petroleum Ltd.

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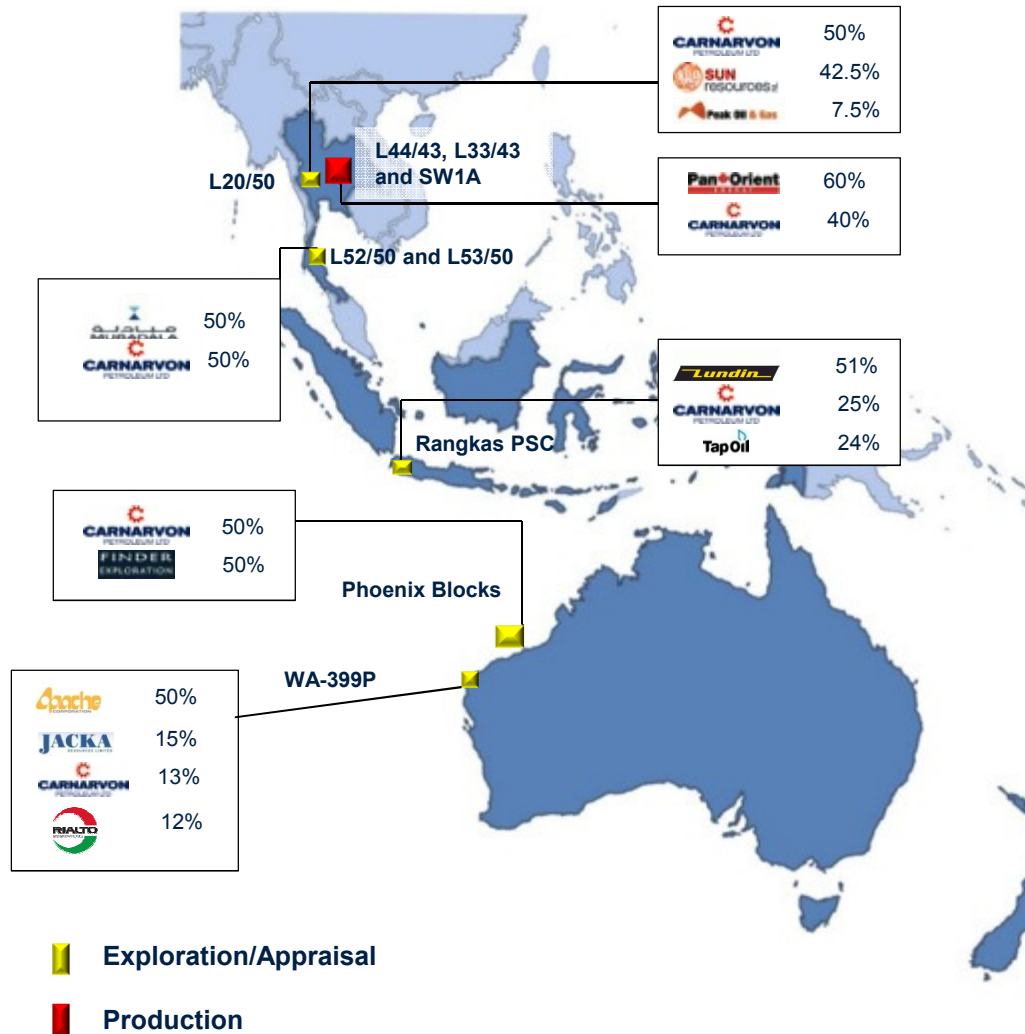
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Australasia and Asia Asset Base

Carnarvon Footprint in Asia



✓ Active in FY 2010/11

- ✓ Drilled 25 wells;
- ✓ Acquired 1,250 km of 2D seismic;
- ✓ Acquired 1,160 km² of 3D seismic;
- ✓ Produced 731,544 bbls of oil

✓ Sizeable Acreage

- ✓ 10 million acres
- ✓ Australia
- ✓ Indonesia
- ✓ Thailand

Corporate snap shot

Market Capitalisation

\$110m

Cash (no debt) (30 June 2011)

\$15m

Profit before exploration write offs (YE 30/6/11)

\$13m

Enterprise value / 2P reserves

US\$4.50/bbl

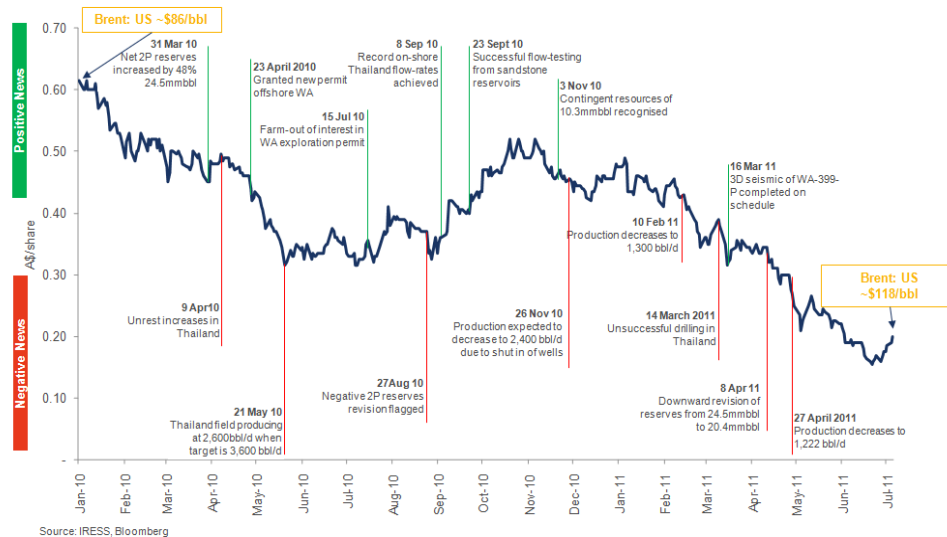
2P Reserves (31 Dec 2010)

20mmbbls

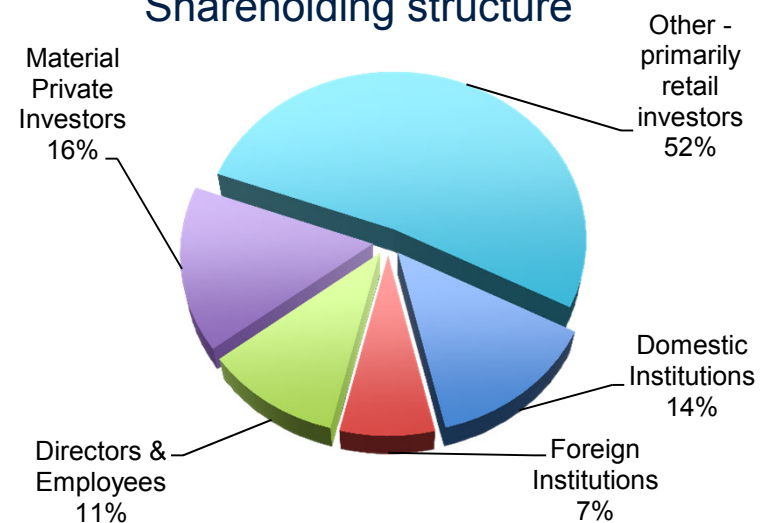
- Proved reserves
- 2P sandstone reserves

4.7mmbbls

4.4mmbbls



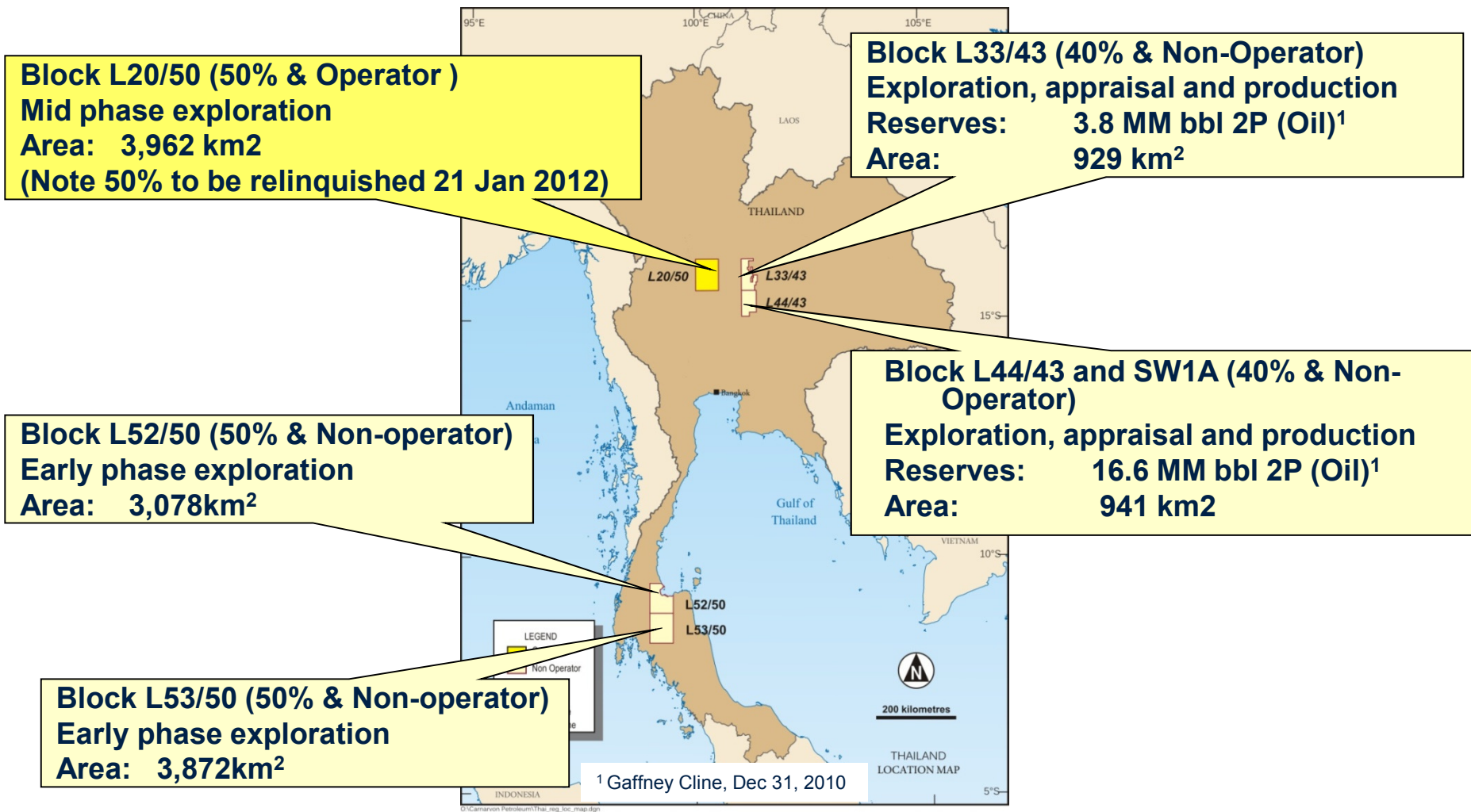
Shareholding structure



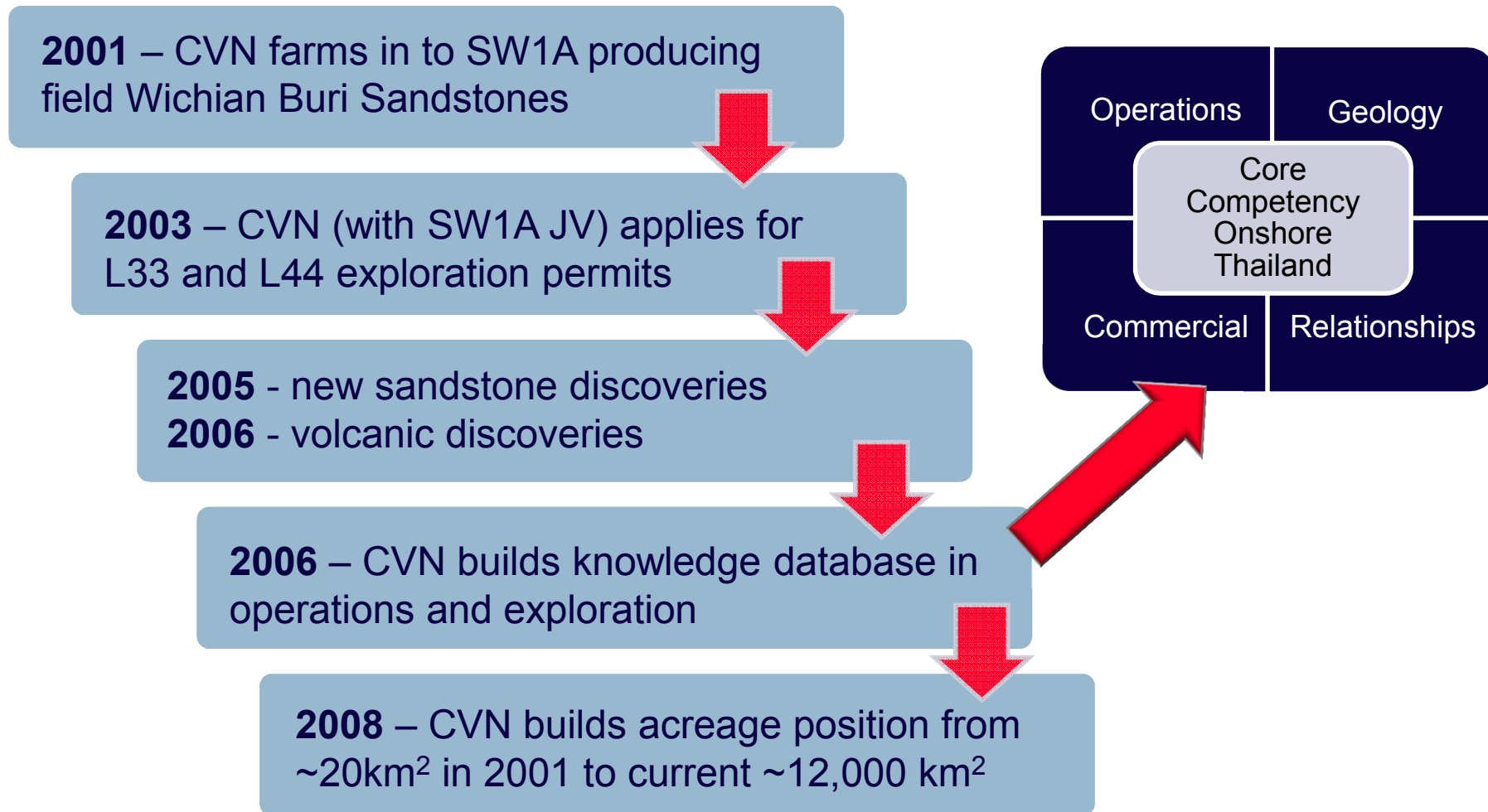


Thailand

Thailand Overview



Key region for Carnarvon



L33/43, L44/43 & SW1A Concessions

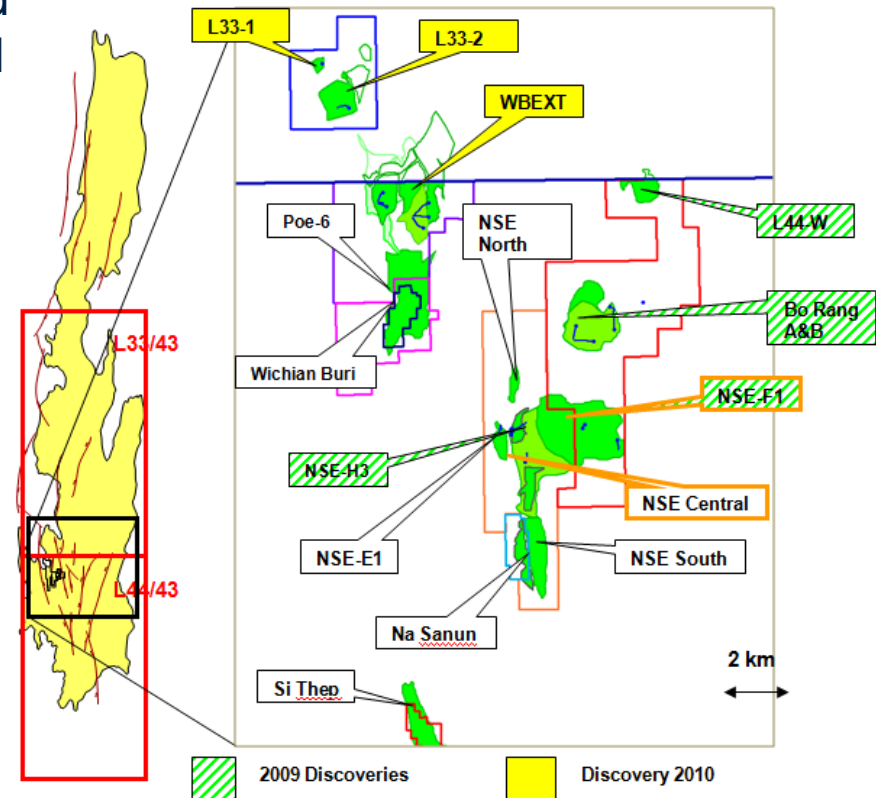
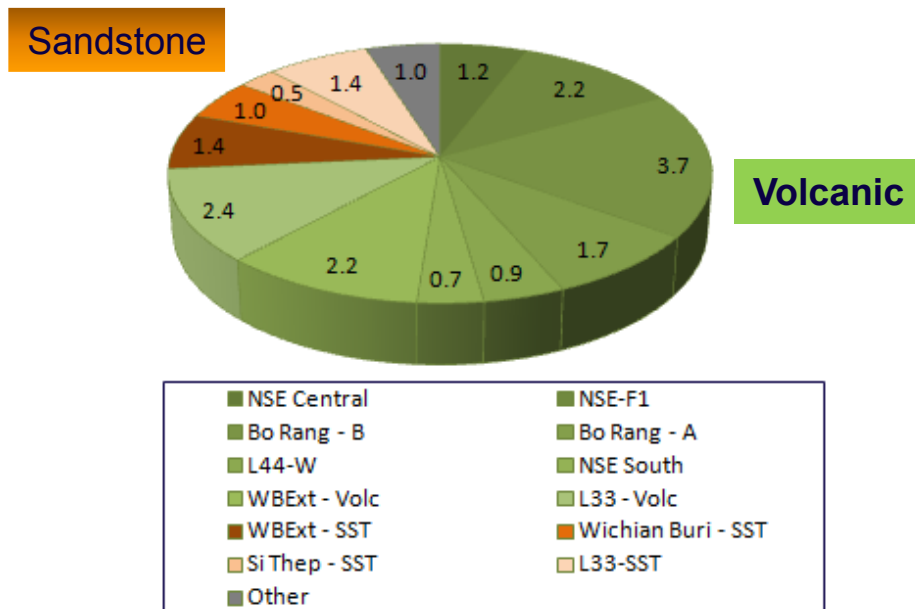


**L33/43, L44/43 &
SW1A
40%**



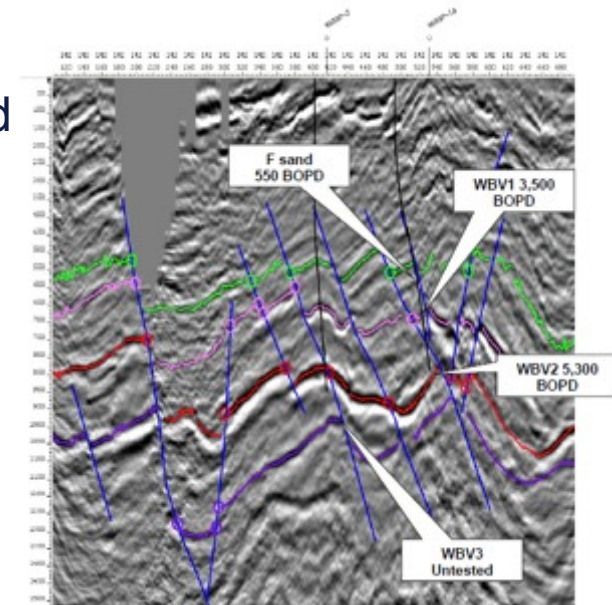
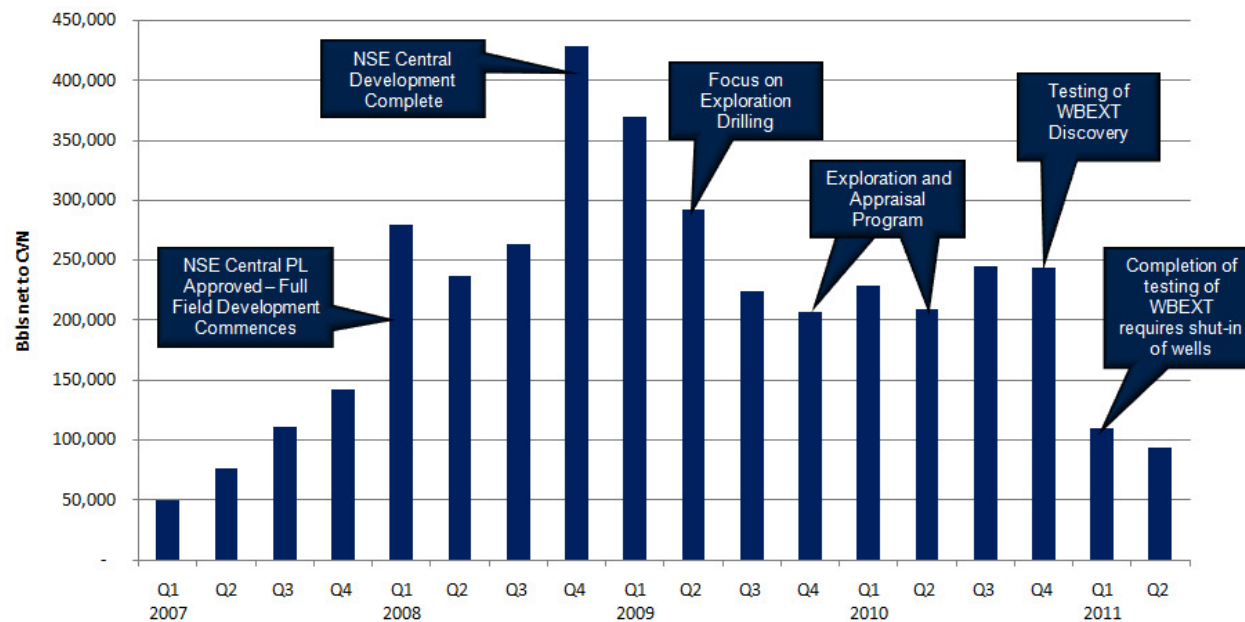
2006 to 2010 - strong reserves growth

- ❖ **2006 - 2P reserves of 3 mmbbls**
 - ❖ Since 2006 some 100 new wells drilled
 - ❖ Over 10 additional oil fields discovered
- ❖ **2010 – 2P reserves of 20 mmbbls**
 - ❖ 5 mmbbls proved (1P);
 - ❖ 52 mmbbls proved, probable & possible (3P)



2011 – production

- ❑ 2011 primarily centered on the WBEXT discoveries
- ❑ WBEXT wells generated flow rates of up to 5,000 bopd
- ❑ The WBEXT wells suffered early water incursion
- ❑ Further WBEXT focused drilling couldn't replicate the results from the earlier wells



Production variability comes from multi-layered fractured volcanic reservoirs

Future

Sandstone Reservoirs – production history since 1995

- ❖ Sandstone reservoirs produced ~400,000 bbls to end of 2010
- ❖ 2P reserves as at end 2010 in the order of 4 million bbls
- ❖ Currently undertaking studies for optimal development
- ❖ Awaiting EIA approval for new well sites to develop

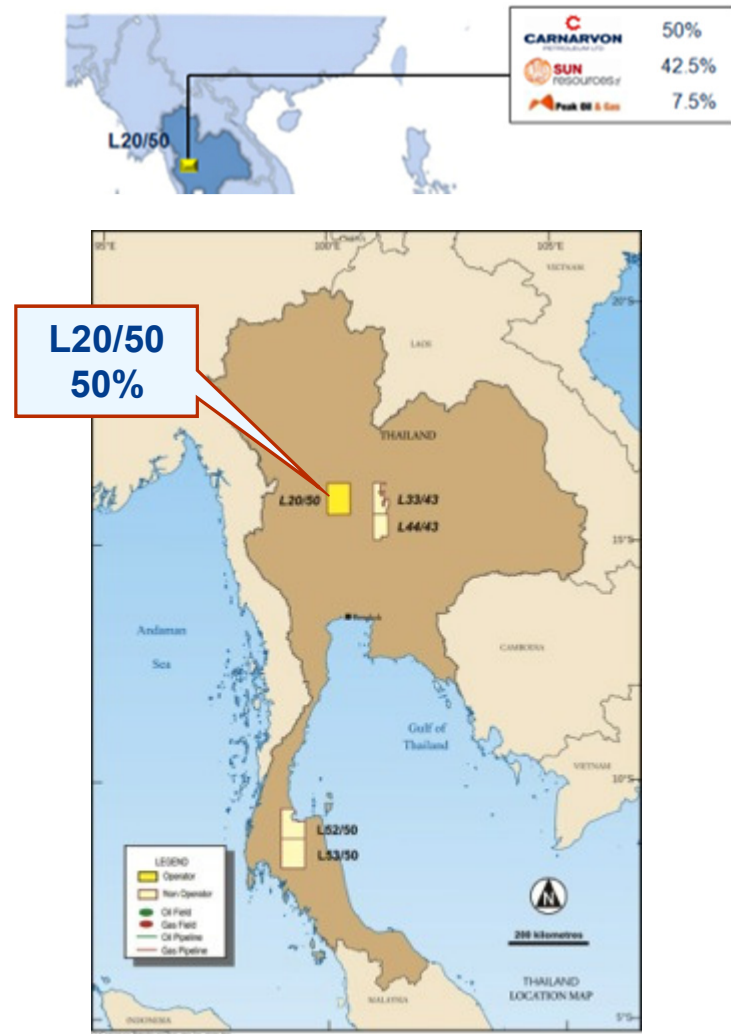
Volcanic Reservoirs – high flow rates, fast payback, but variable

- ❖ Volcanics produced around 4 million bbls from 2006 to 2010
- ❖ 2P reserves as at end 2010 nearly four times that amount
- ❖ Understanding fractured reservoirs remains a focus but also a great potential
- ❖ Currently undertaking fracture analysis and stress regime studies

Other Potential – 3P reserves, exploration, technology

- ❖ Substantial 3P reserves and resources require delineation
- ❖ Exploration + application of new & existing technology

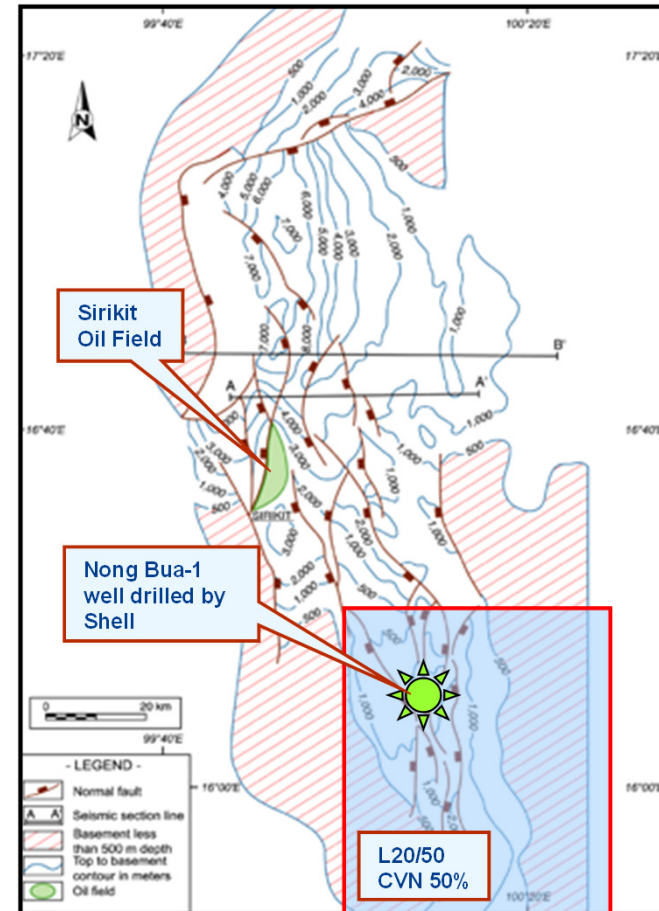
L20/50 Concession



Exploring for on trend oil

- ❖ On trend with 200 million barrel Sirikit Oil Field (produced over 150 mmbbls & still producing ~20,000bopd)
- ❖ Nong Bua-1 drilled by Shell with oil shows & potential oil column in sandstone
- ❖ Initial analysis suggested a simple pumping operation may have been commercial
- ❖ We have the knowledge to enable rapid development and commercialisation

Carnarvon 50% (Operator)
Sun Resources 42.5%
Peak Oil and Gas 7.5%



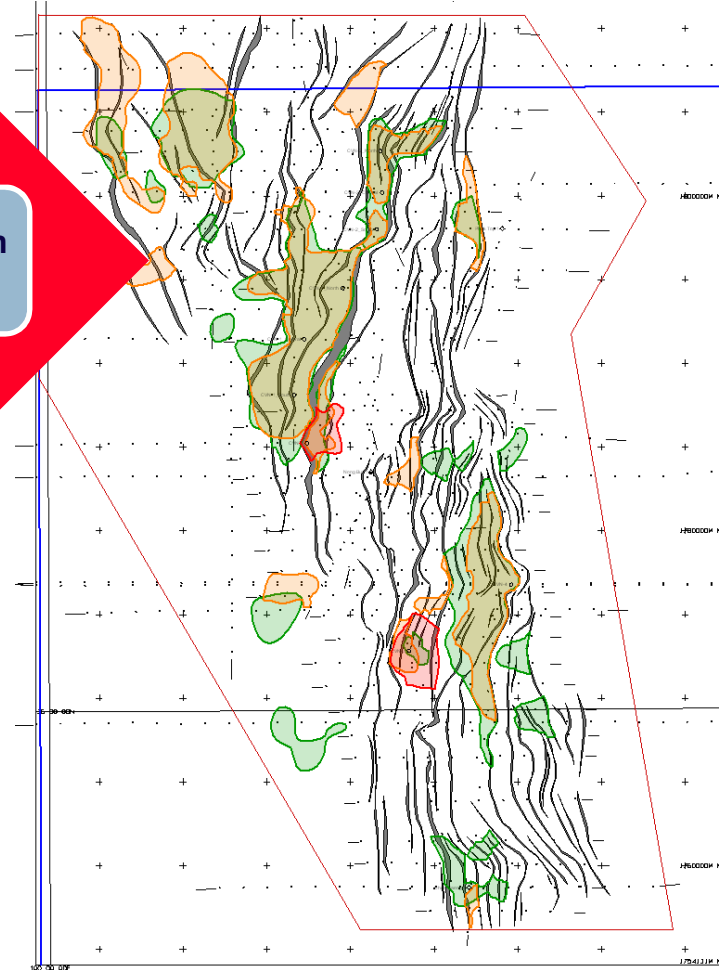
Structural Contour Depth Map to Top Basement and Major Faults (Modified after Bal et al. 1992)

Seismic acquisition and interpretation



Acquisition
2009

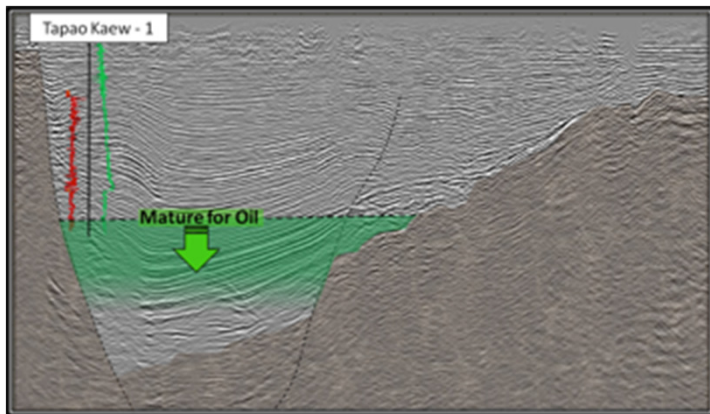
Interpretation
2010



- ❖ 20-30 leads identified from 2009 seismic at three stratigraphic levels;
- ❖ Nine locations highlighted for surface scouting;
- ❖ Three locations completed drill site construction

Encouraging results

- ❖ Two wells drilled by CVN in 2011
- ❖ De-risked key elements to prove a working petroleum system exists



Trap...?

Wells drilled in the basin to date have likely not been drilled on viable structures, due to complex geology and sparse 2D data coverage



Reservoir:

Intersection of several thin, reservoir quality sands (better than pre-drill expectations) in Tapao Kaew, Krai Thong, and Nong Bua, suggest a good chance of encountering reservoir in future wells



Seal:

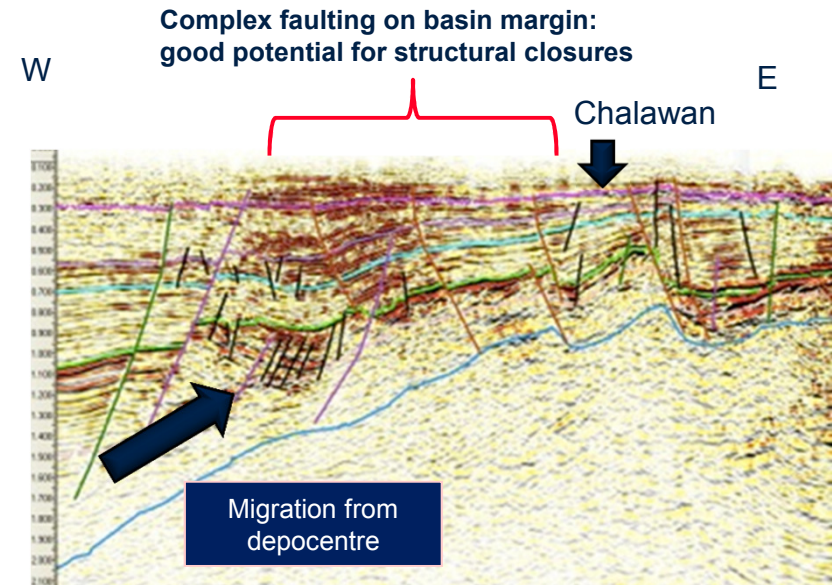
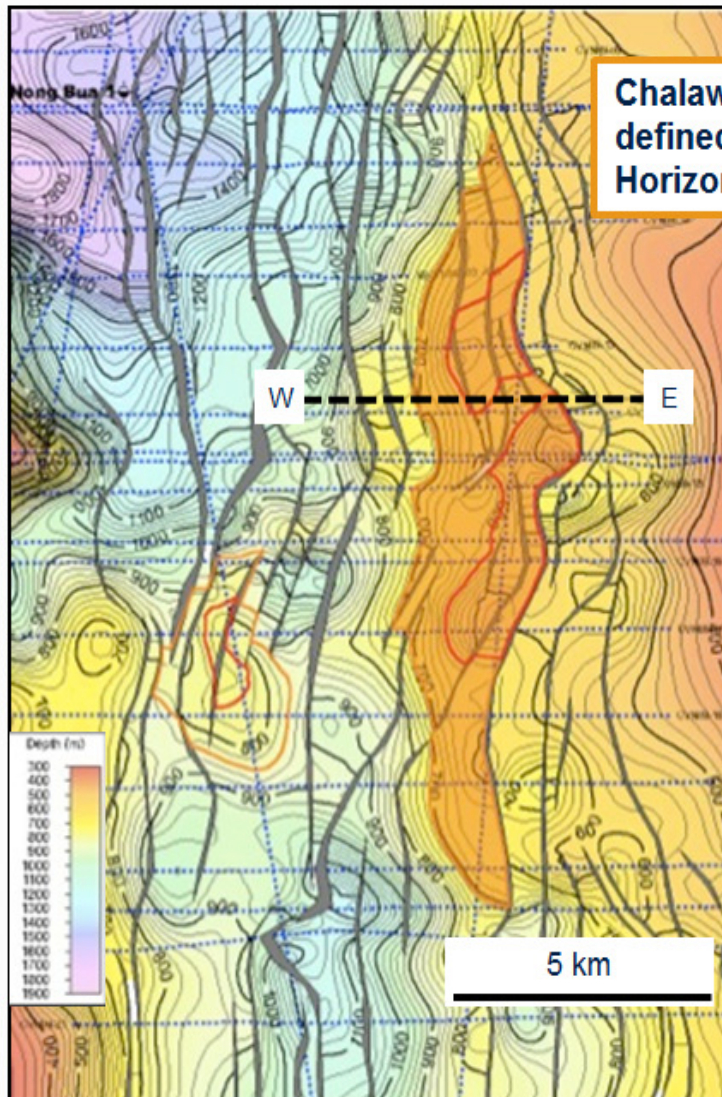
All wells to date have penetrated stratigraphy with good sealing potential



Source:

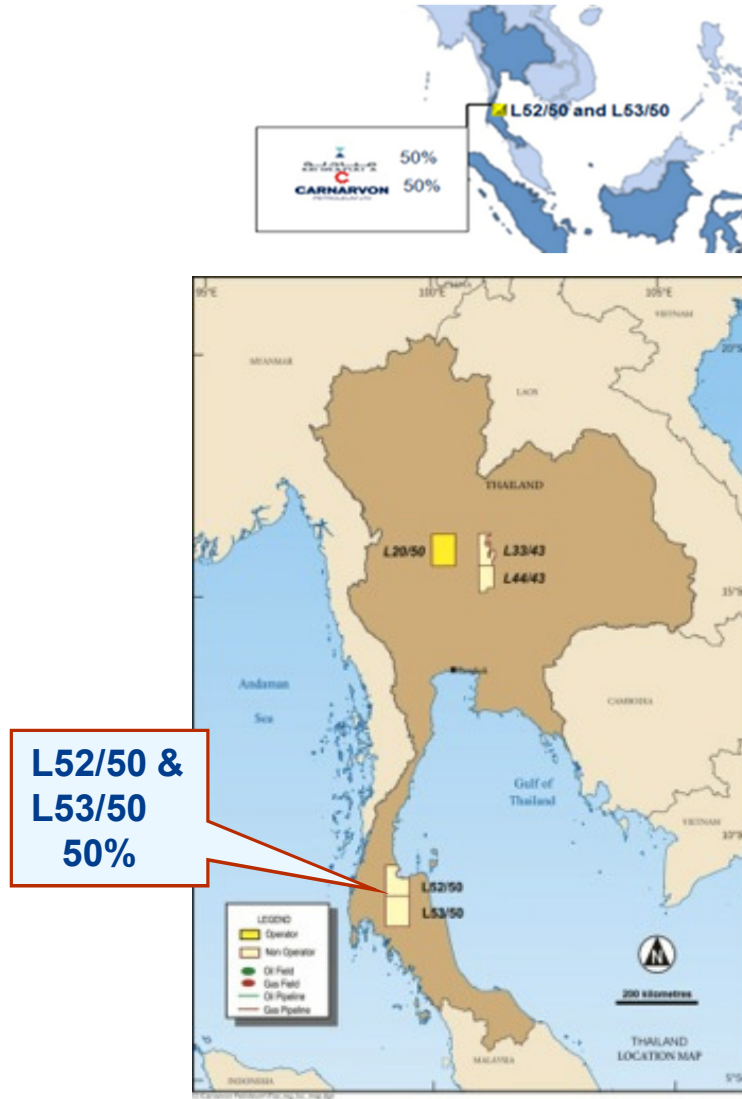
Geochemical analyses from recent wells suggest good to excellent quality, mature source rocks.

Focus on valid traps



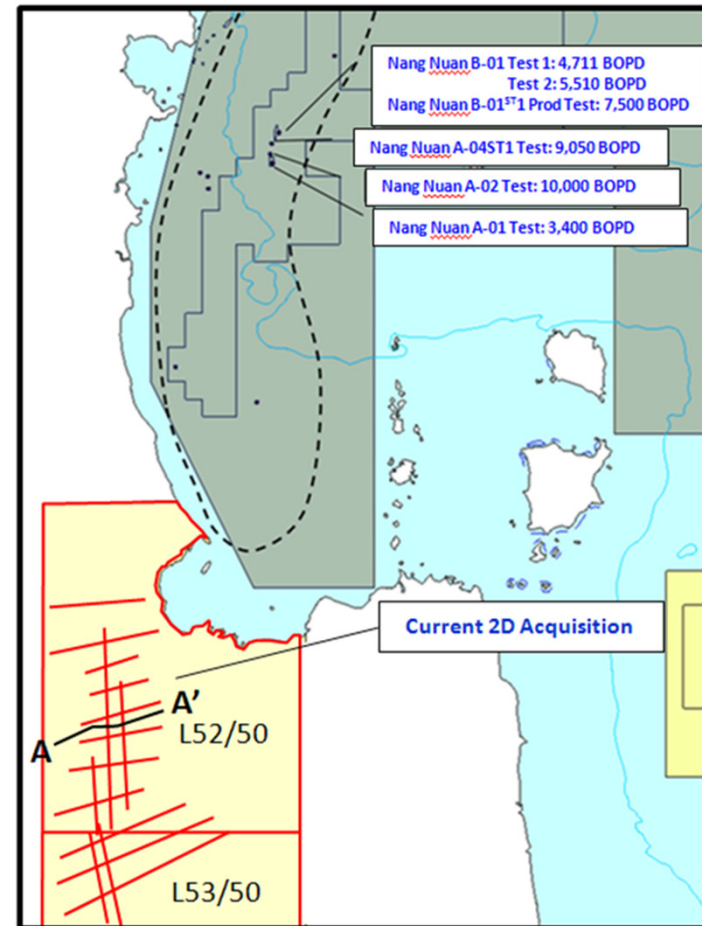
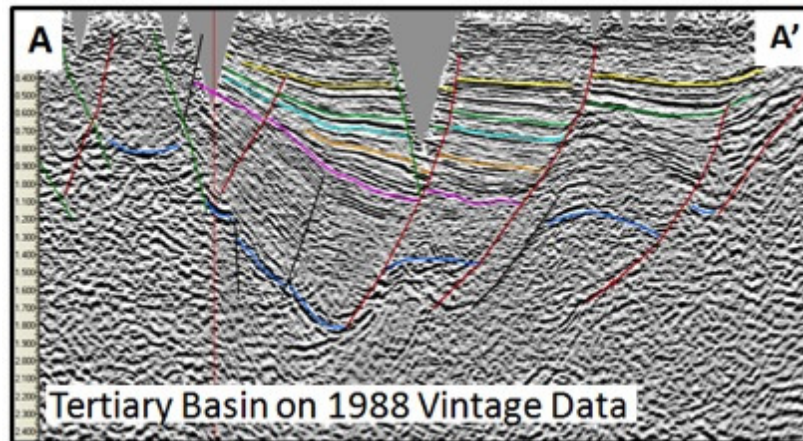
- ❖ Complex faulting and multiple fault terraces on eastern flank of basin
- ❖ Good potential for trapping along likely hydrocarbon migration pathways
- ❖ Forward plan:
 - Reprocessing 2D seismic data;
 - 3D seismic acquisition to better define structures and de-risk the trap

L52/50 & L53/50 Concessions



Early stage exploration

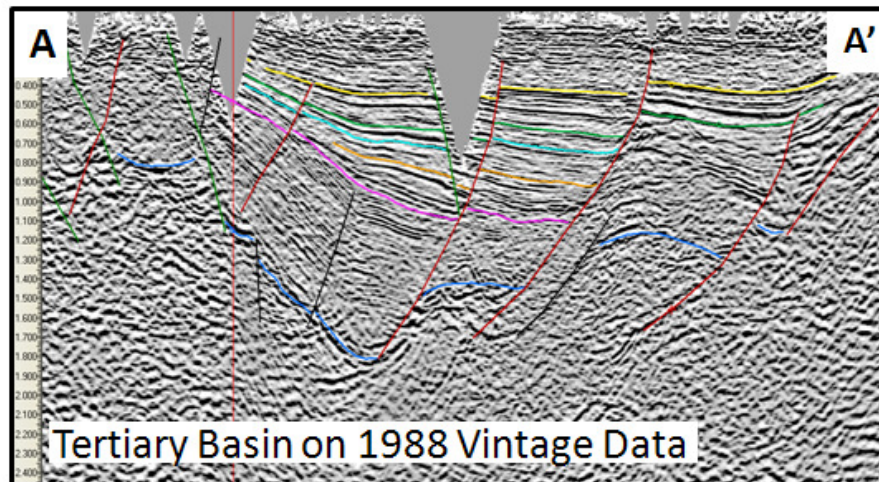
- ❖ Under-explored basin with few valid well tests
- ❖ Close proximity to prolific offshore basins in the Gulf of Thailand
- ❖ Surface geological and structural mapping completed in 2010
- ❖ Currently acquiring new 2D seismic to infill sparse 1988 vintage data



CVN 50% & Pearl 50% & operator

Initial work - encouraging

- ❖ Review of old wells show fair to excellent potential source rocks
- ❖ Outcrops confirm multiple reservoir potential (sandstone and limestone)



Limestone



Sandstone interbedded with siltstone



Sandstone interbedded with Siltstone (sandstone dominated)

Ongoing work

- ❖ Initial structural maps (based on old 2D scanned data) shows multiple leads
- ❖ Currently acquiring new 2D seismic to infill sparse 1988 vintage data – concentrating on areas over known leads
- ❖ Drilling of two wells planned for 2012

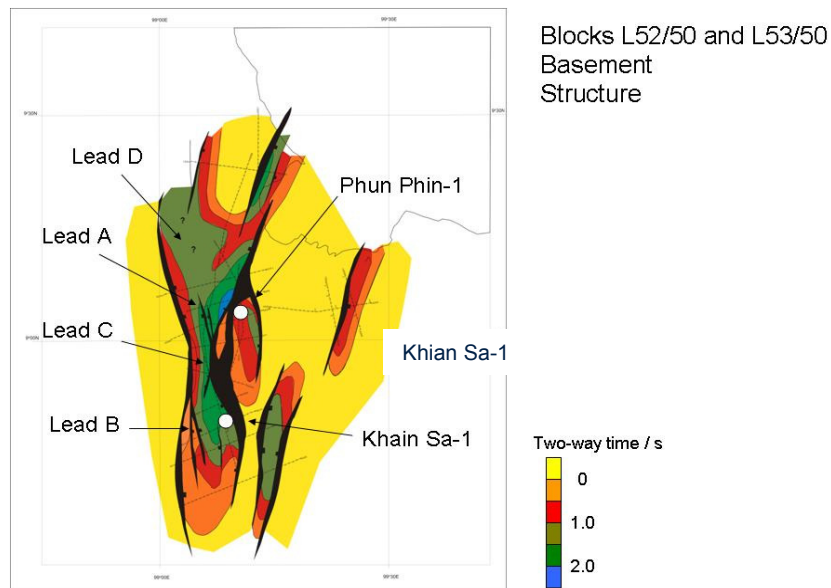
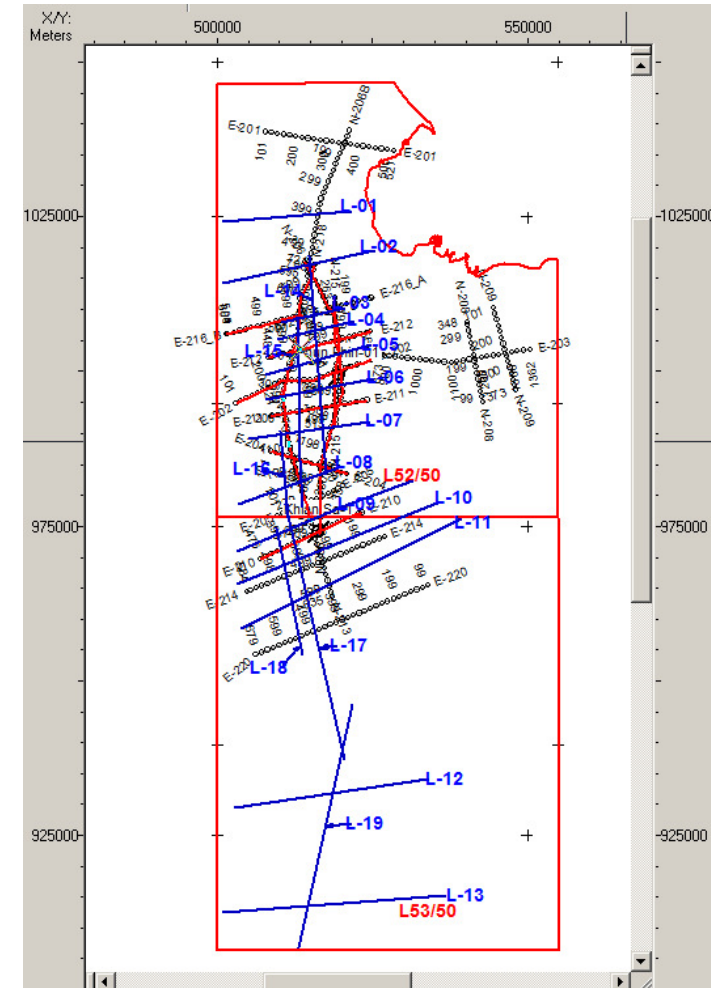
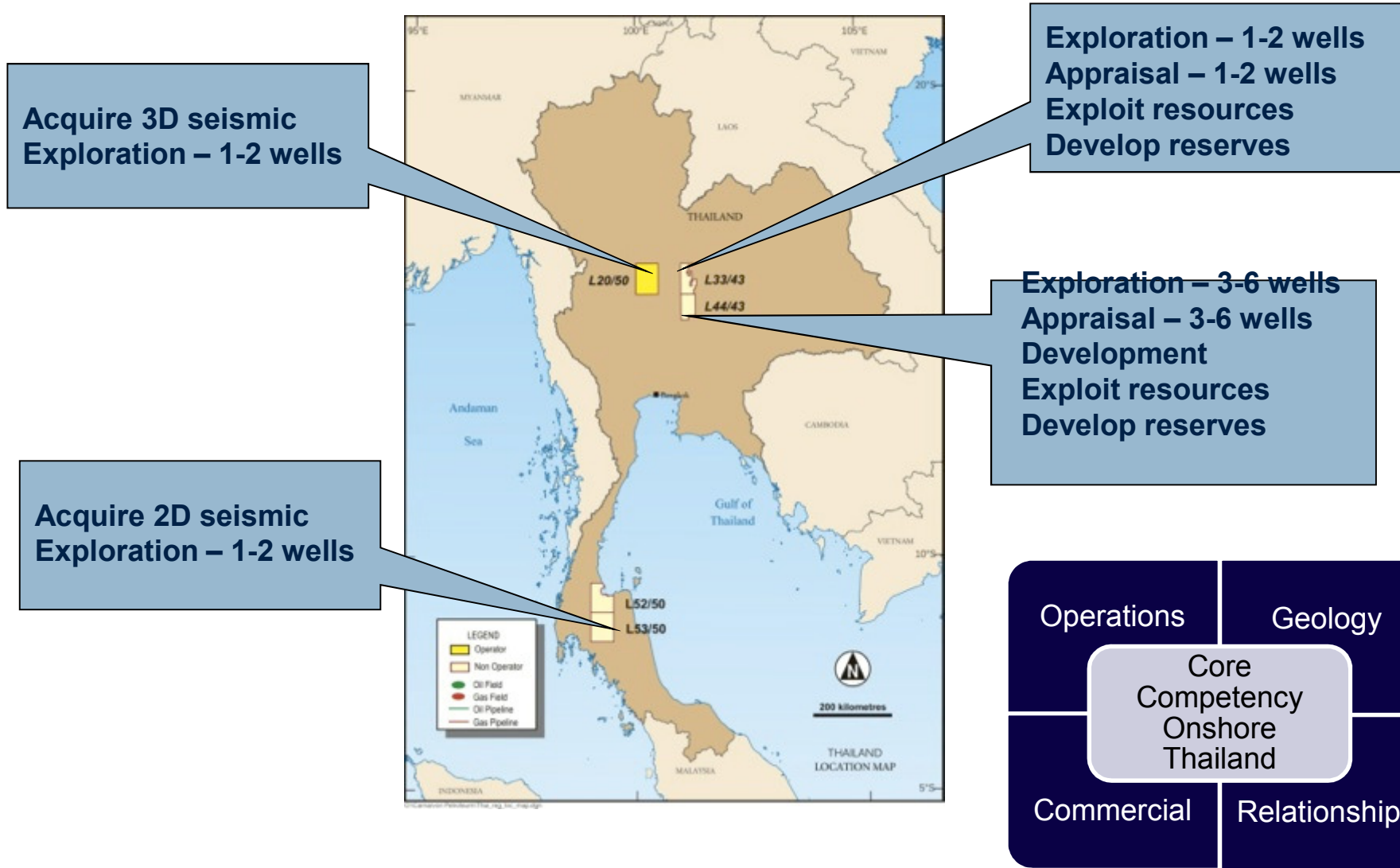


Fig.6



Next 1-2 years in Thailand



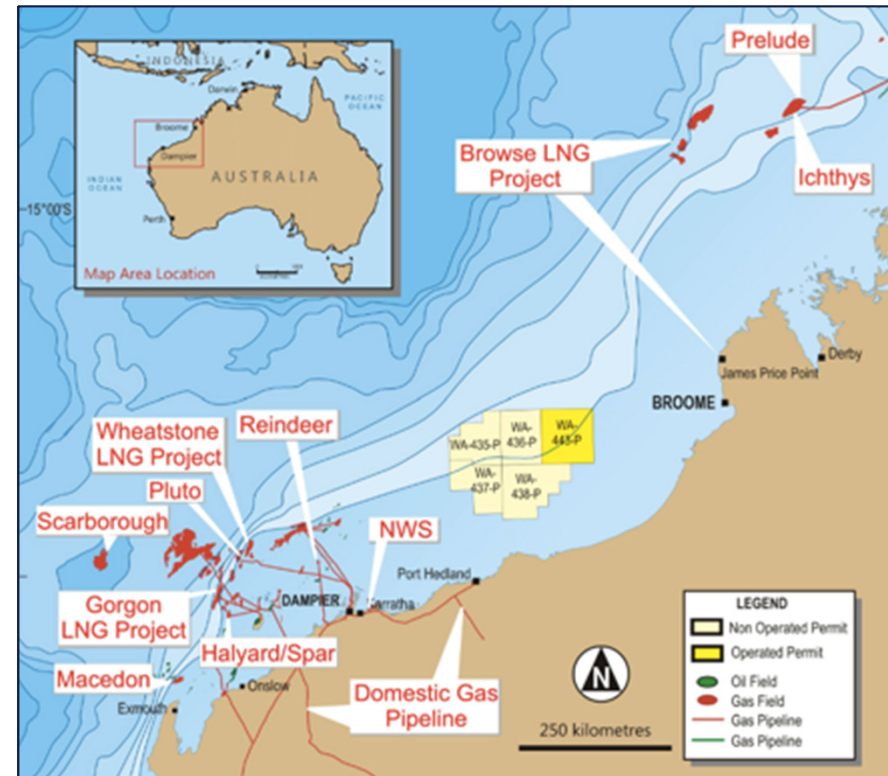


Australia

Phoenix – significant value potential

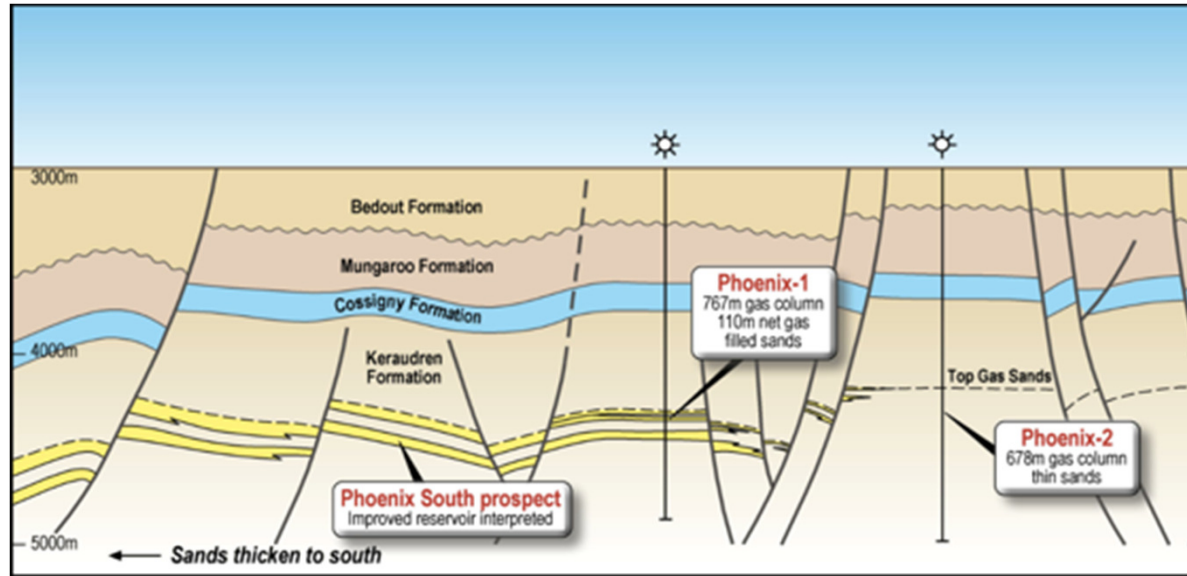
Material interests + large acreage + discovered gas

- ❖ Interests of 50% & 100%
- ❖ 28,300km² acreage holding
 - ❖ plenty of running room
- ❖ Gas discovered by BP in 1980
- ❖ Focus on WA-435-P & WA-437-P
 - ❖ contains the discovered gas
 - ❖ contains new 3D seismic data
- ❖ Large number of Prospects and leads
- ❖ Material gas volumes with possible condensate.



The “Phoenix” asset refers to Carnarvon’s 50% interest in the WA-435-P, WA-436-P, WA-437-P and WA-438-P Permits and its 100% interest in the WA-443-P Permit

Gas discovered - Phoenix-1 well



The Phoenix-1 well reduces key geological risks on multi Tcf accumulations, such as the Phoenix South prospect.

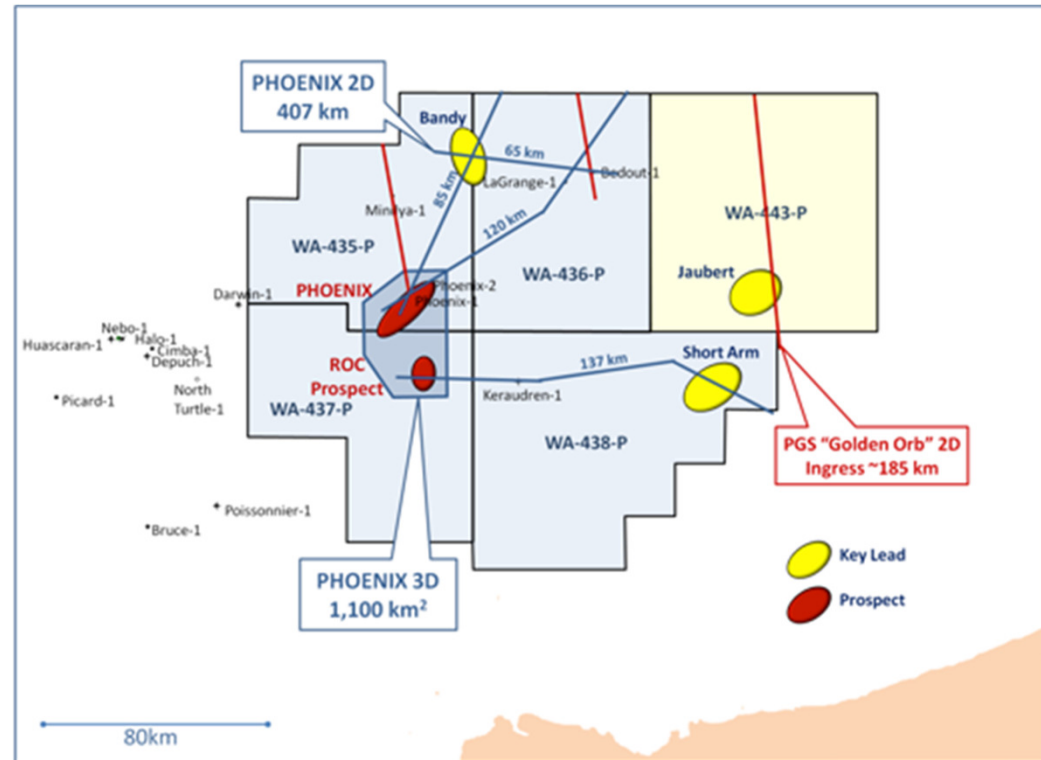
Extracts from BP's Phoenix-1 well Geological Completion Report (July 1980) and Well Evaluation Report (Nov 1980):

- “Thicker sandstones below 4113m yielded significant gas shows”
- “Net gas-bearing pay is estimated to be 110.5m”.
- “Drilling was suspended (at total depth 4880m) without testing when it was considered unsafe to continue with available pressure control equipment”.
- “WELL STATUS: Suspended with gas shows”.

New data - 3D and 2D seismic

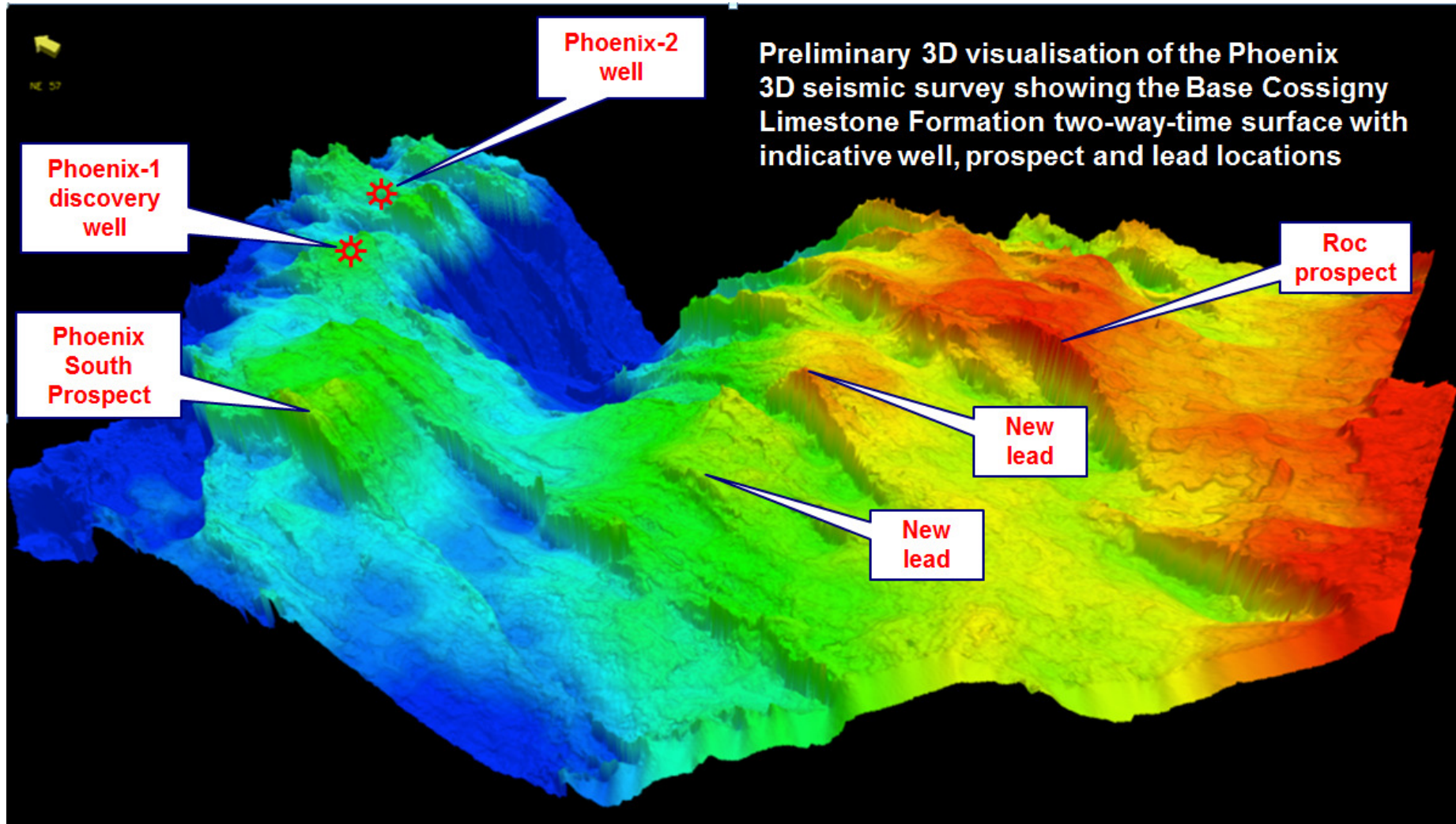
Building valuable knowledge

- ❖ Phoenix-1 - gas discovery
- ❖ Phoenix-2 – tight gas
- ❖ Kerauderan-1 – quality sands
- ❖ New 3D – 1,100km²
- ❖ New regional 2D – 407km

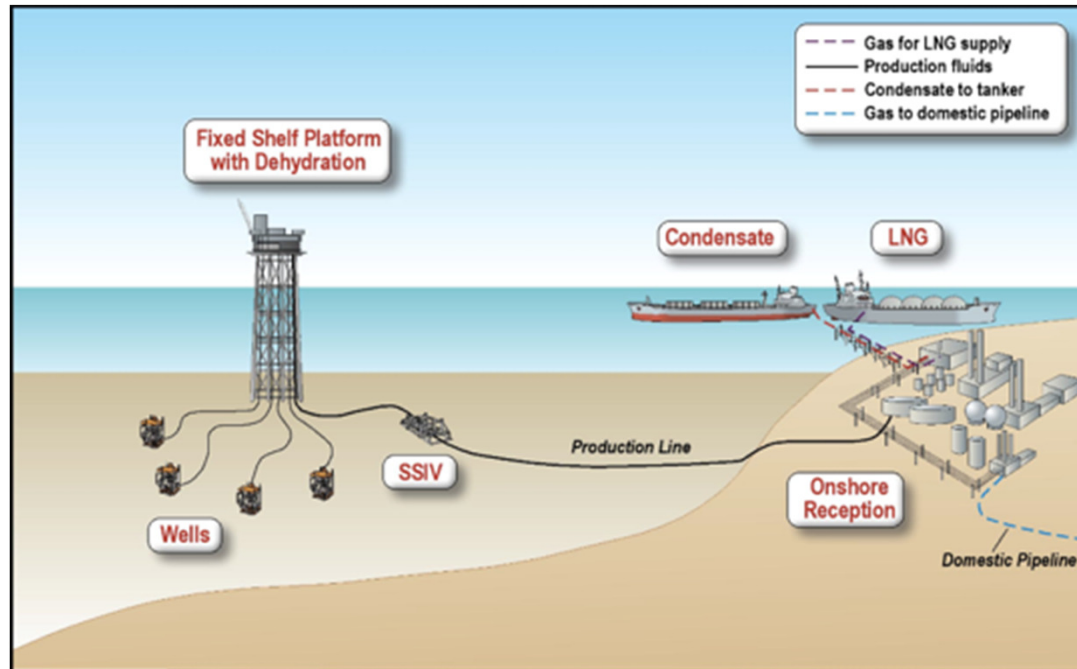


- ❑ Prospect sizes are significant and range from 0.5 to 3.0 Tcf of recoverable gas.
- ❑ Drilling to focus on prospects in 3D survey & on trend with Phoenix gas discovery
- ❑ Drilling likely in water depths of around 140m, similar to Phoenix-1 and 2 wells.
- ❑ Well depths similar to the Phoenix-1 and 2 wells at around 5,000m.

First images from the 3D seismic data set



Development – standard configuration

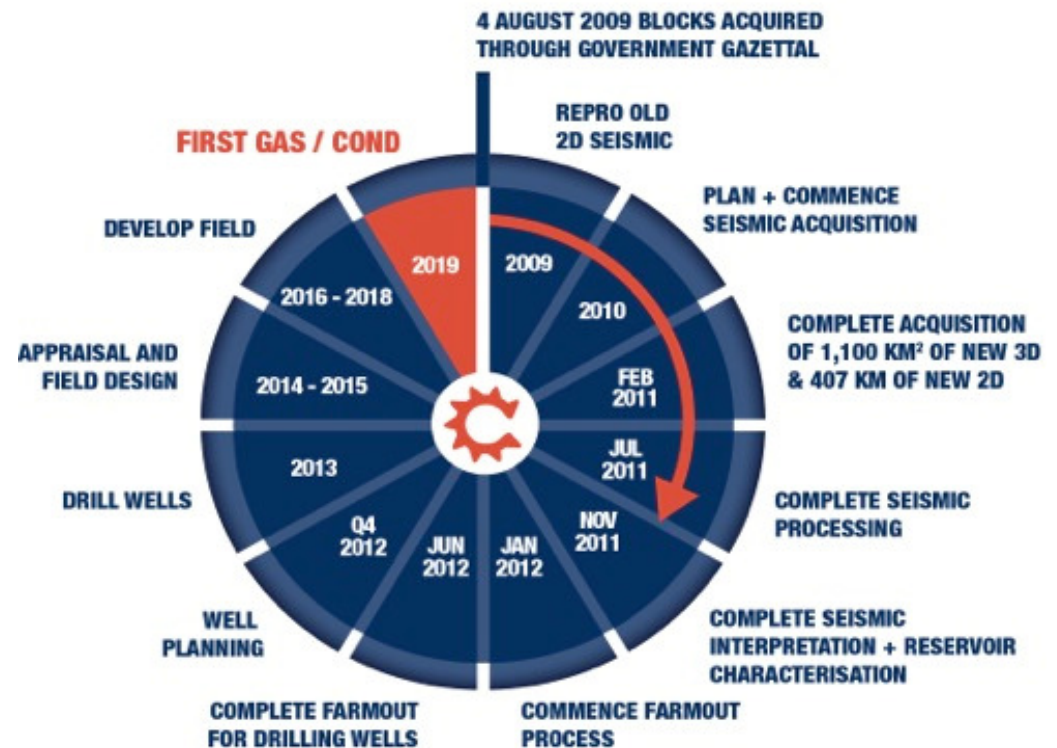


Planning for:

- ❑ Gas & condensate, based on Phoenix well results & regional field assessments.
- ❑ LNG or domgas configuration options.
- ❑ Options to utilise existing domestic gas pipeline near Port Hedland.
- ❑ A Granherne Concept Study supports a conventional field development.

Clear plan – achievable timeline

- ❑ Very clear strategy
- ❑ Minimising key risk elements
- ❑ Material prospects & leads
- ❑ Strong interest in the asset
- ❑ Material equity interests
- ❑ Multiple routes to crystallise value
- ❑ In a growing market for gas & LNG



The time line above is indicative only



Conclusion

Management's priorities

- ❖ **Steadily improve the base production from sandstone reservoirs**
 - ✧ (L44/43 & L33/43 Concessions, Thailand).
- ❖ **Continue drilling high flowing volcanic reservoirs**
 - ✧ (L44/43 & L33/43 Concessions, Thailand).
- ❖ **Farm-out Phoenix asset**
 - ✧ to accelerate the drilling of potentially significant value prospects.
- ❖ **Pursue growth opportunities**
 - ✧ Exploration - current portfolio;
 - ✧ Exploration - new assets; and
 - ✧ Sensible acquisitions.



Ground Floor
1322 Hay Street
West Perth WA 6005
Telephone: +61 (8) 9321 2665
Fax: +61 (8) 9321 8867
www.carnarvon.com.au

