

Corporate Presentation

15 September 2011



ASX ANNOUNCEMENT

Carnarvon Petroleum Limited ("Carnarvon") (ASX:CVN) is pleased to provide shareholders with the attached Corporate Presentation given by Mr Adrian Cook, Carnarvon Managing Director, at the Macquarie Mid-cap Oil and Gas Conference, Macquarie Office, Level 3 No.1 Martin Place, Sydney on Thursday 15 September 2011.

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

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Yours faithfully

A handwritten signature in black ink, appearing to be "A Cook", written over a light blue horizontal line.

Adrian Cook
Managing Director
Carnarvon Petroleum



Macquarie Securities Group
Mid-Cap Oil & Gas Conference
15 September 2011



Disclaimer

The information in this document, that relates to oil exploration results and reserves, is based on information compiled by the Company's Chief Operating Officer, 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.

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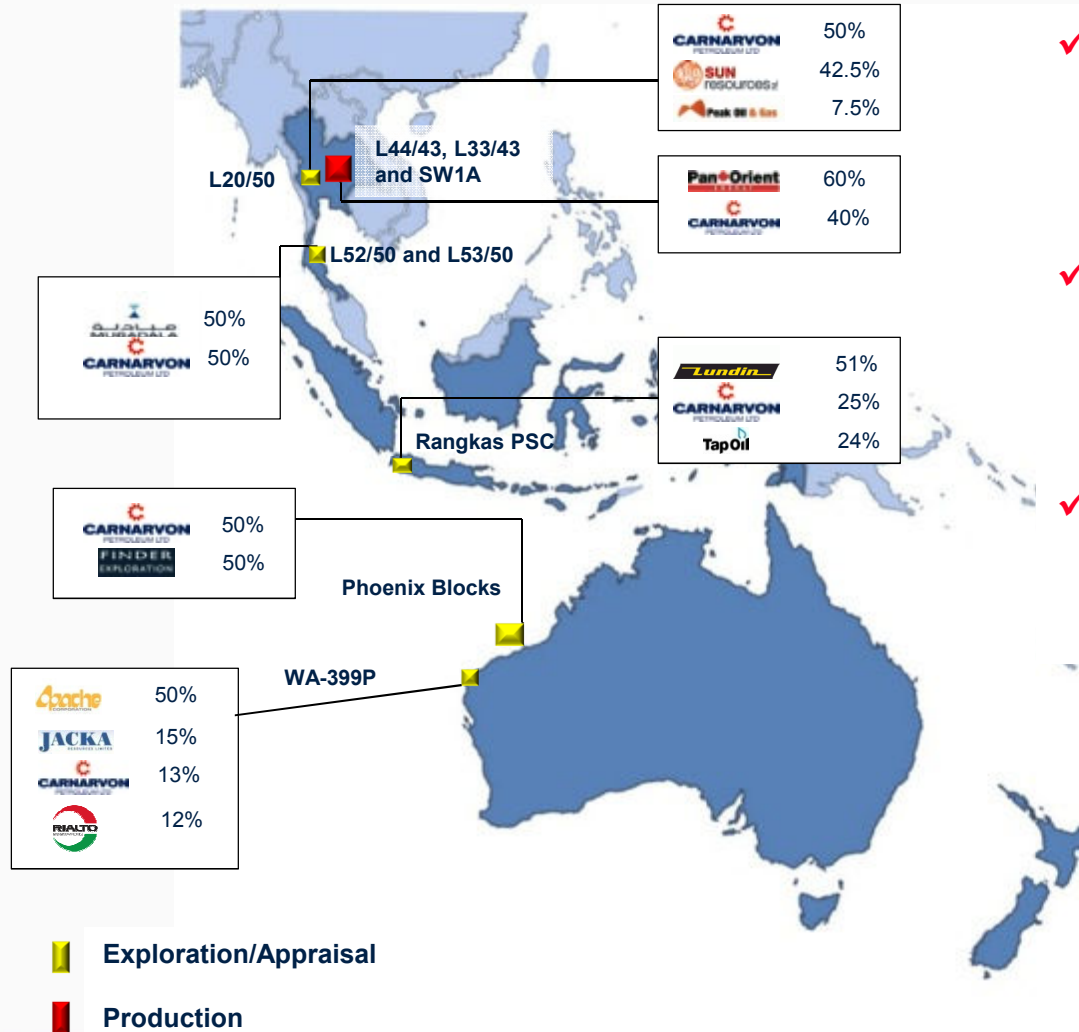
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Overview

Overview



✓ Production

- ✓ Onshore oil
- ✓ Thailand

✓ Reserves

- ✓ Sandstone reservoirs
- ✓ Volcanic reservoirs

✓ Exploration

- ✓ South East Asia
- ✓ Australia

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

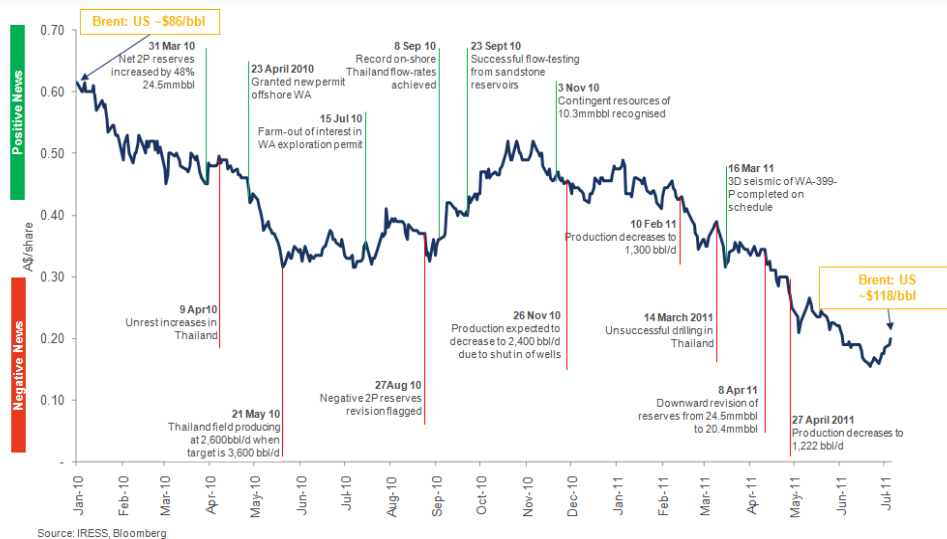
2P Reserves (31 Dec 2010)

20mmbbls

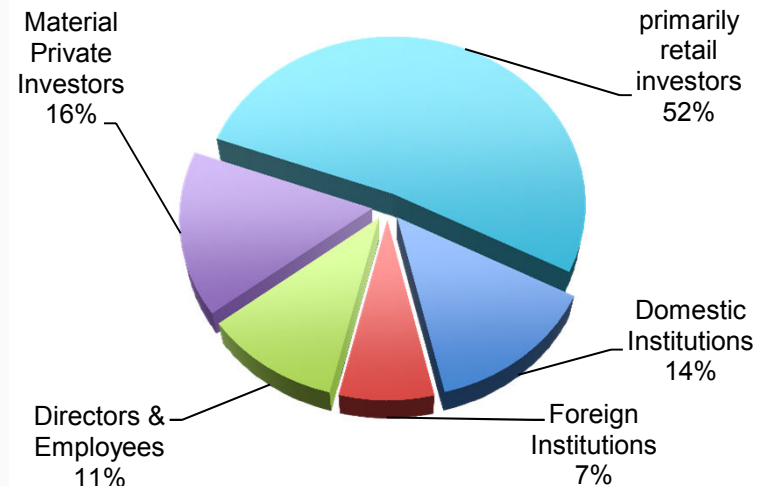
- Proved reserves
- 2P sandstone reserves

4.7mmbbls

4.4mmbbls



Shareholding structure





Thailand

Key region for Carnarvon

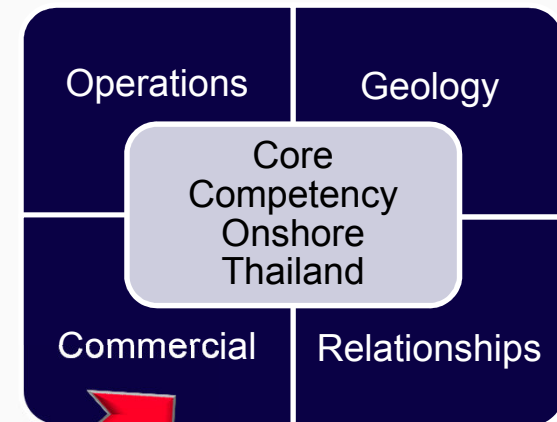
2001 – CVN farms in to SW1A producing field Wichian Buri Sandstones

2003 – CVN (with SW1A JV) applies for L33 and L44 exploration permits

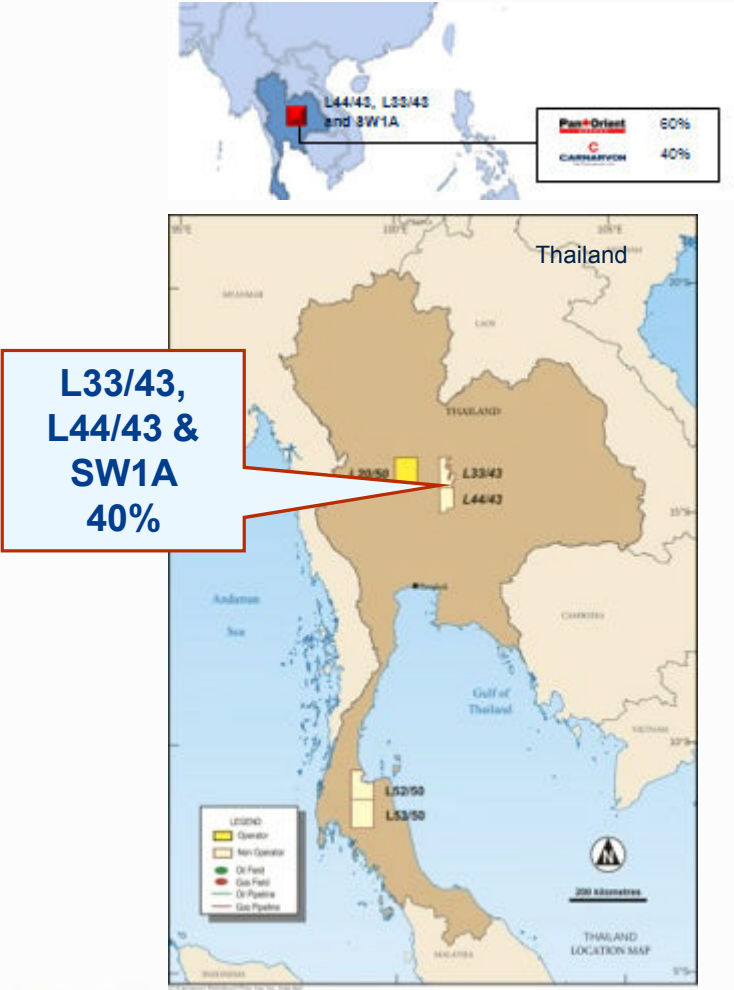
2005 - new sandstone discoveries
2006 - volcanic discoveries

2006 – CVN builds knowledge database in operations and exploration

2008 – CVN builds acreage position from ~20km² in 2001 to current ~12,000 km²



L33/43, L44/43 & SW1A Concessions



2006 to 2010 - strong reserves growth

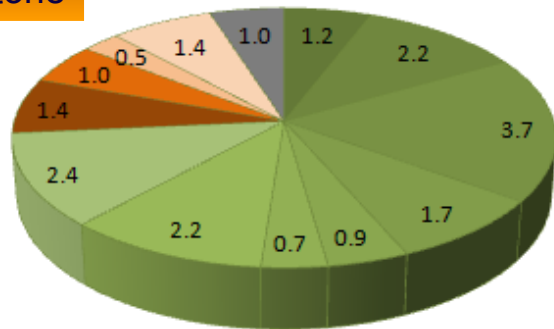
❖ 2006 - 2P reserves of 3 mmbbls

- ❖ Since 2006 some 100 new wells drilled
- ❖ Over 10 additional oil fields discovered

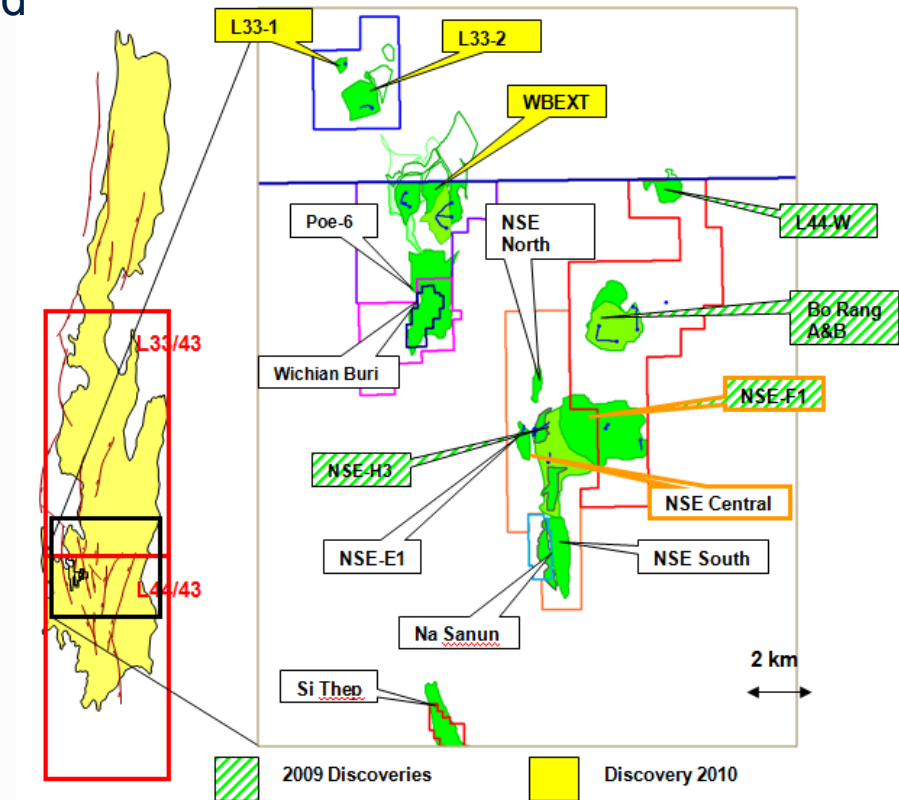
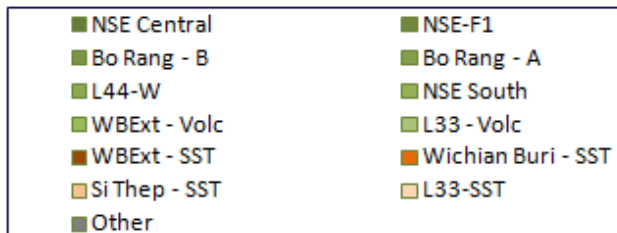
❖ 2010 – 2P reserves of 20 mmbbls

- ❖ 5 mmbbls proved (1P);
- ❖ 52 mmbbls proved, probable & possible (3P)

Sandstone

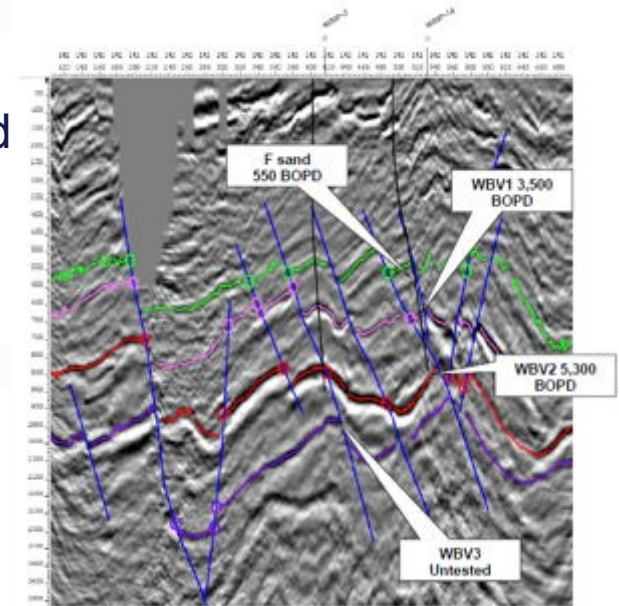
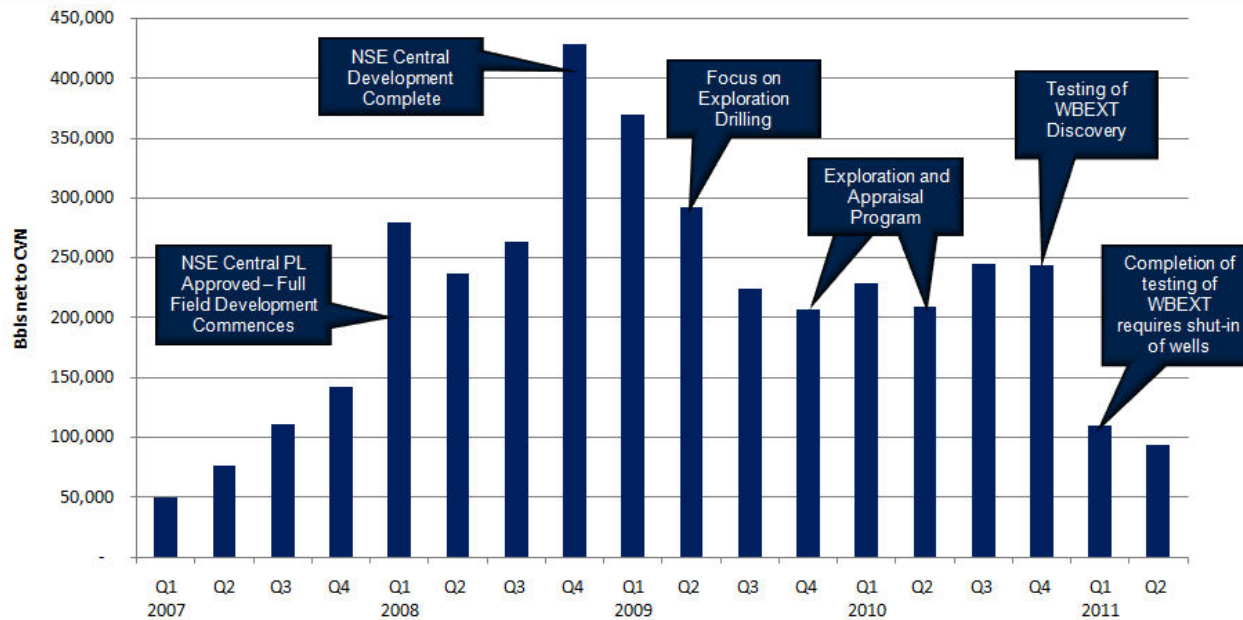


Volcanic



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

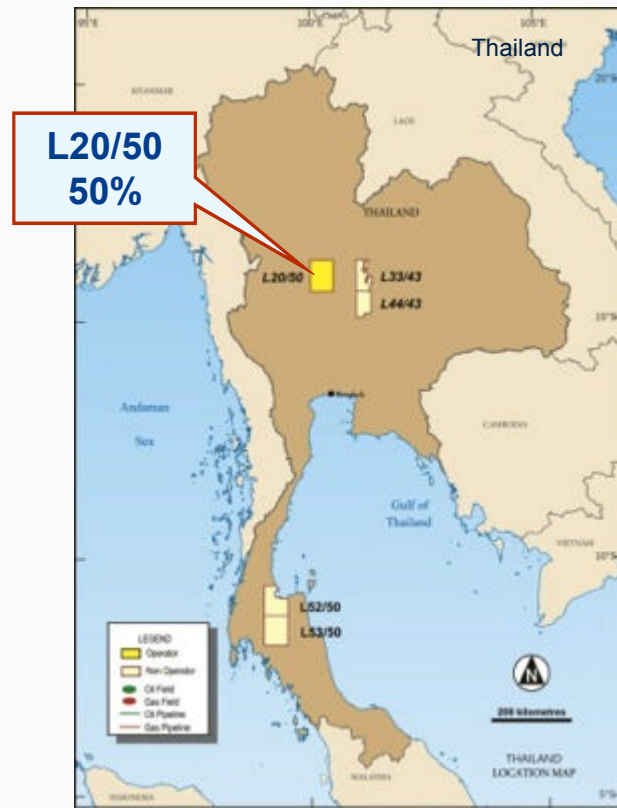
Volcanic Reservoirs – high flow rates, fast payback, but variable

- ❖ 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 – Perth basin tight gas....

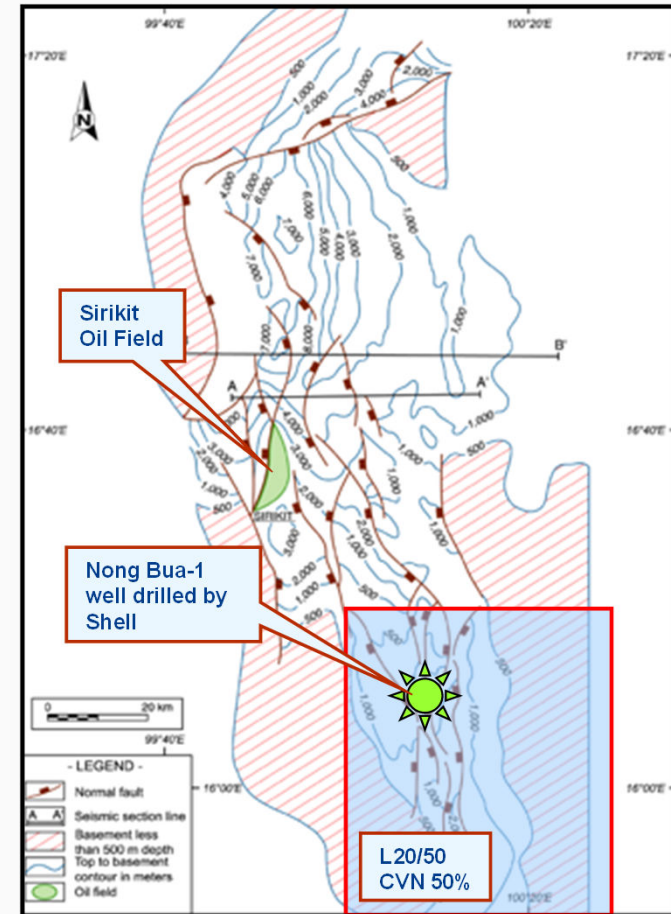
L20/50 Concession



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

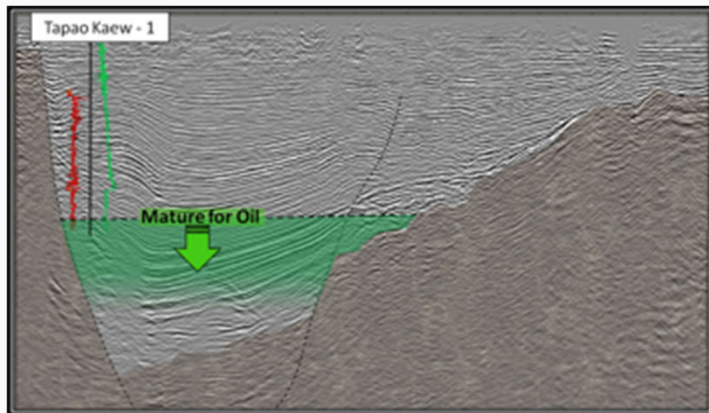
Carnarvon 50% (Operator)
Sun Resources 42.5%
Peak Oil and Gas 7.5%



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

Encouraging results

- ❖ Two wells drilled by CVN in 2011
- ❖ As indicated at the time, we were not expecting a commercial result.
- ❖ 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

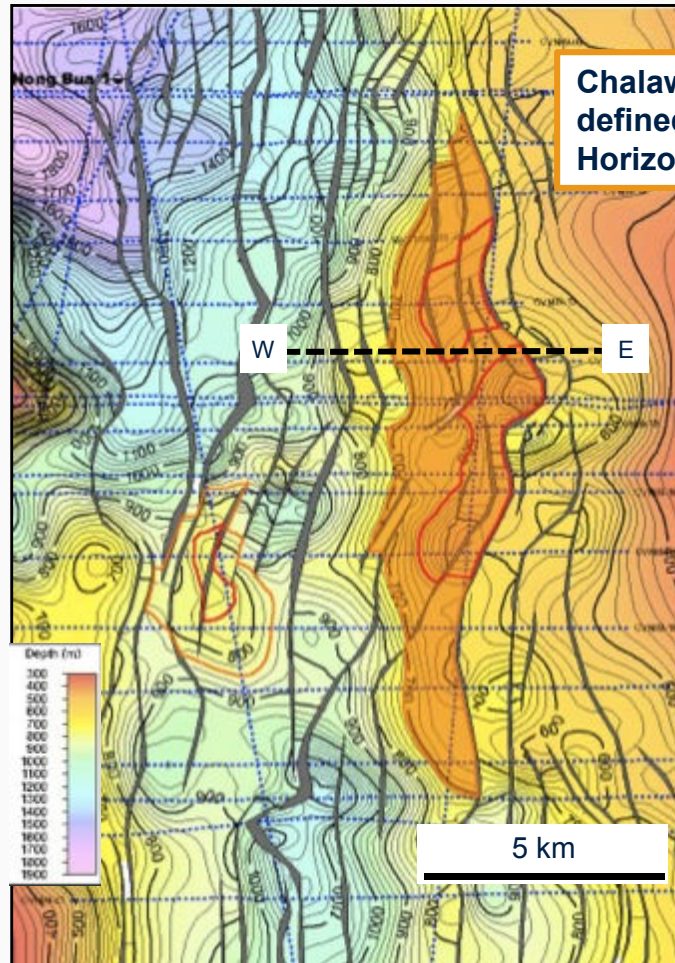
Seal:

All wells to date have penetrated stratigraphy with good sealing potential

Source:

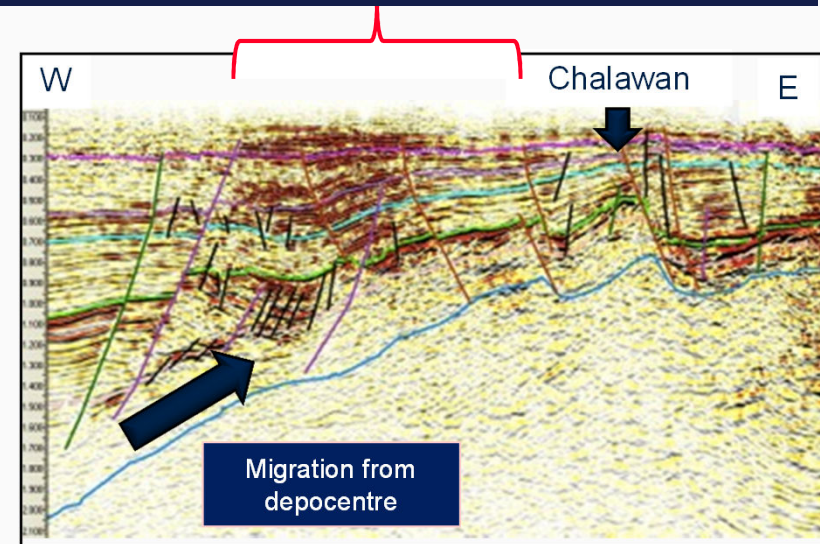
Geochemical analyses from recent wells suggest good to excellent quality, mature source rocks.

Focus on valid traps



Chalawan prospect defined on 'Unc A' Horizon

Complex faulting on basin margin: good potential for structural closures



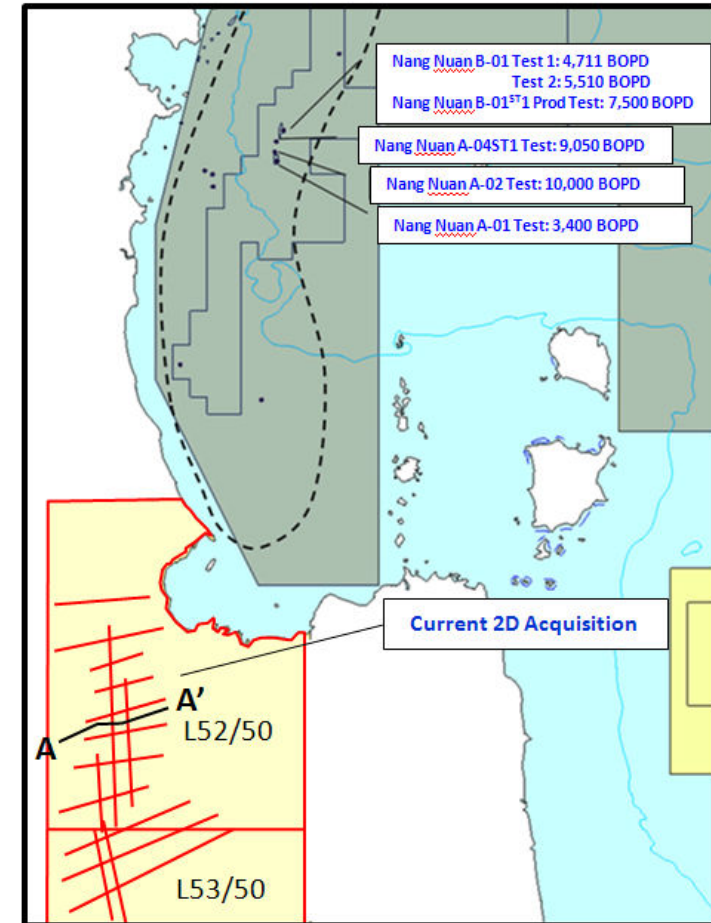
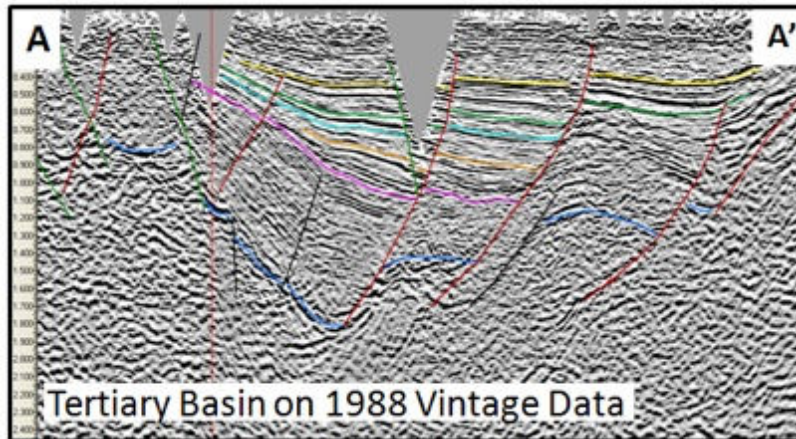
- ❖ Complex faulting and multiple fault terraces on eastern flank of basin
- ❖ Good potential for trapping along likely hydrocarbon migration pathways
- ❖ Forward plan:
 - Reprocessing 2D seismic data;
 - 3D seismic acquisition to better define structures and de-risk the trap

L52/50 & L53/50 Concessions



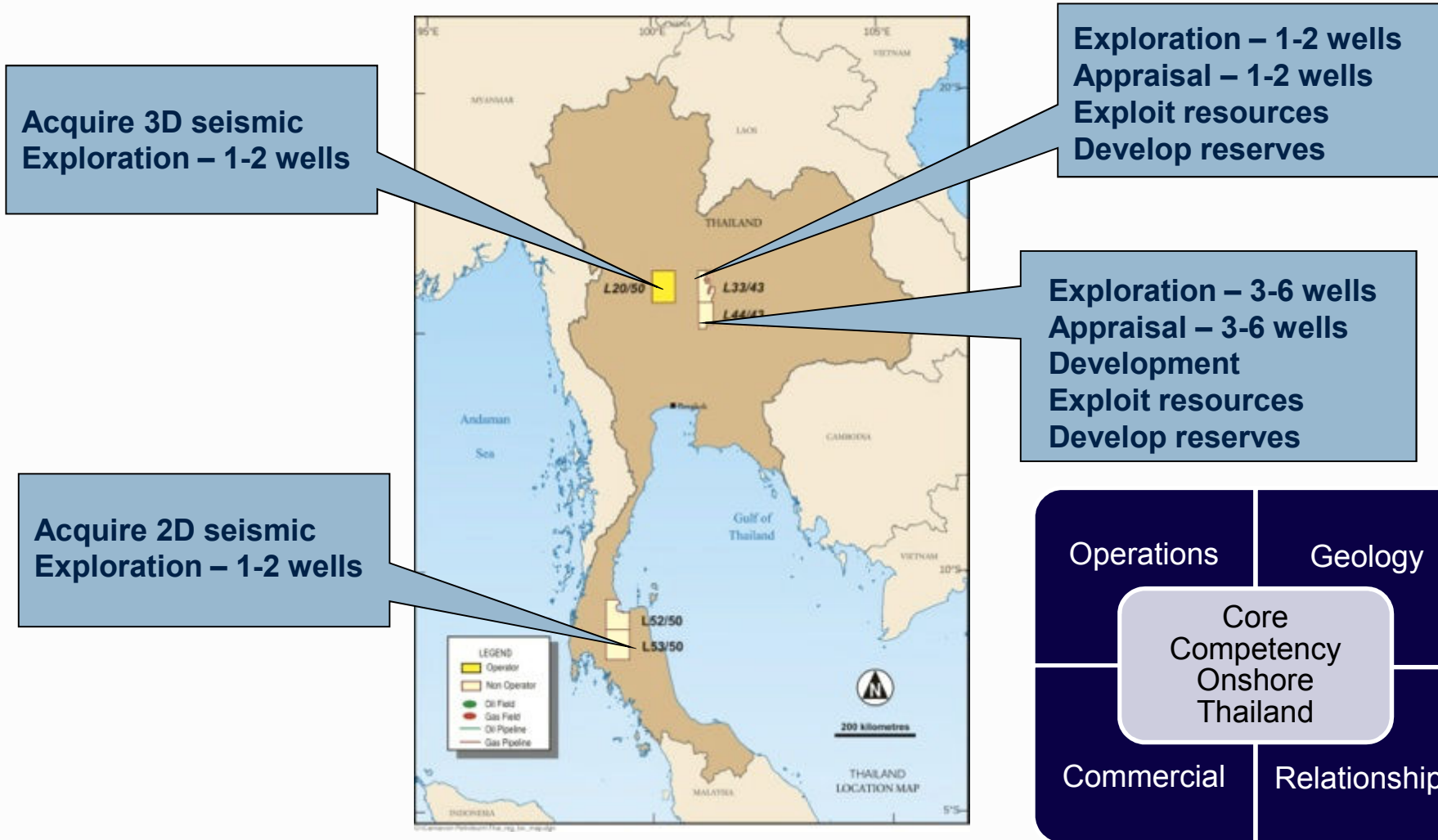
Early stage exploration

- ❖ 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

Next 1-2 years in Thailand



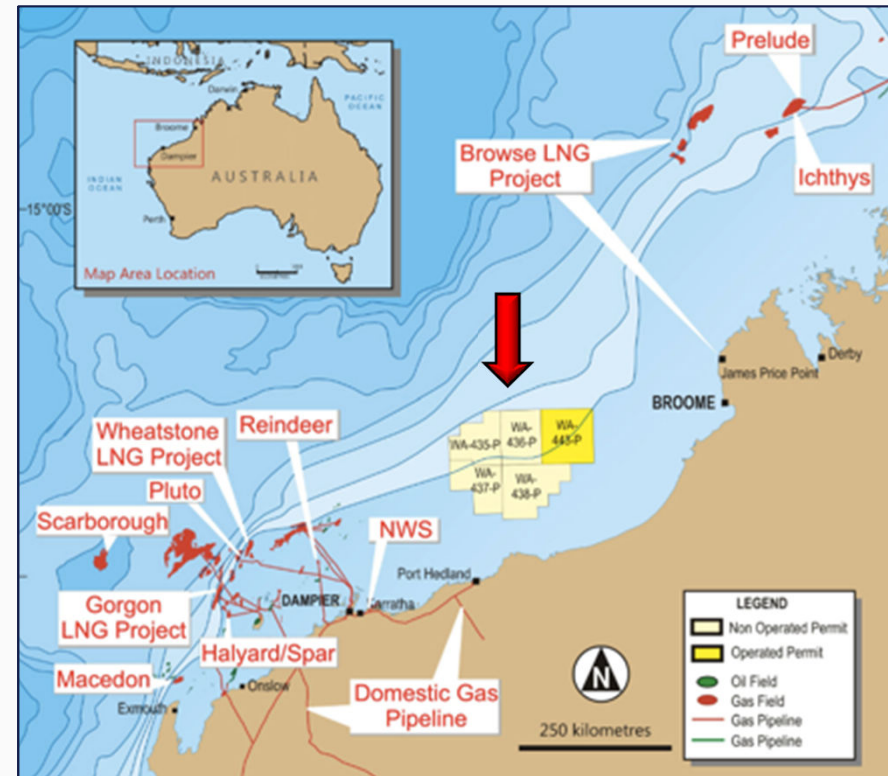


Australia

Phoenix – significant value potential

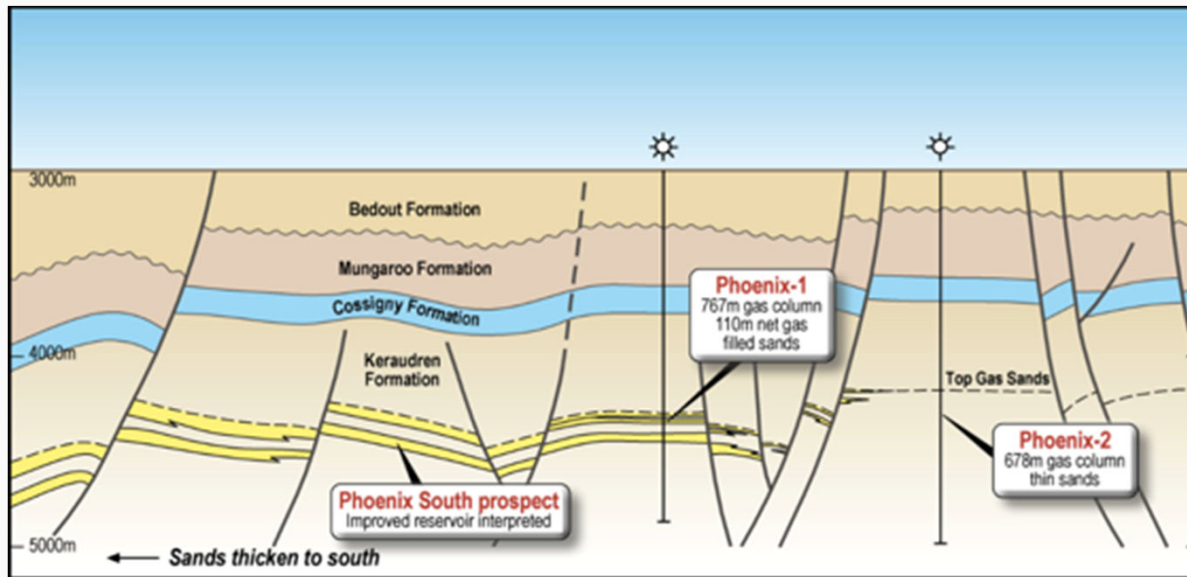
Material interests + large acreage + discovered gas

- ❖ 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 recoverable 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):

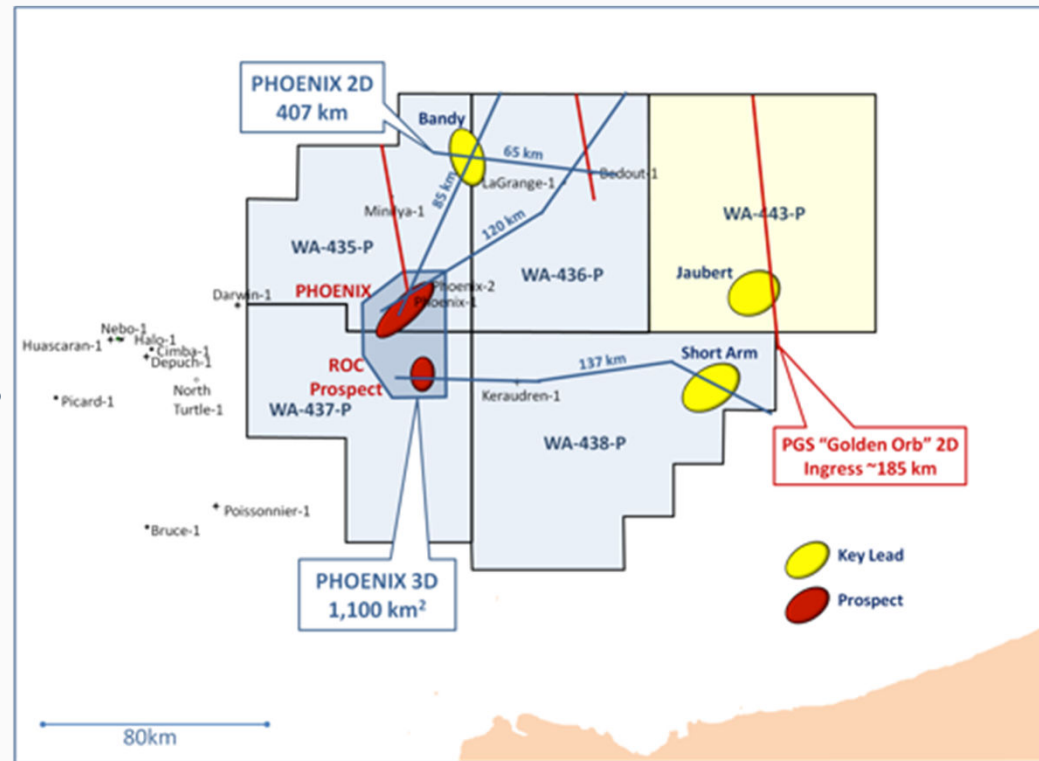
- ❑ “Thicker sandstones below 4113m yielded significant gas shows”
- ❑ “Net gas-bearing pay is estimated to be 110.5m”.
- ❑ “Drilling was suspended (at total depth 4880m) without testing when it was considered unsafe to continue with available pressure control equipment”.
- ❑ “WELL STATUS: Suspended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

New data - 3D and 2D seismic

Building valuable knowledge

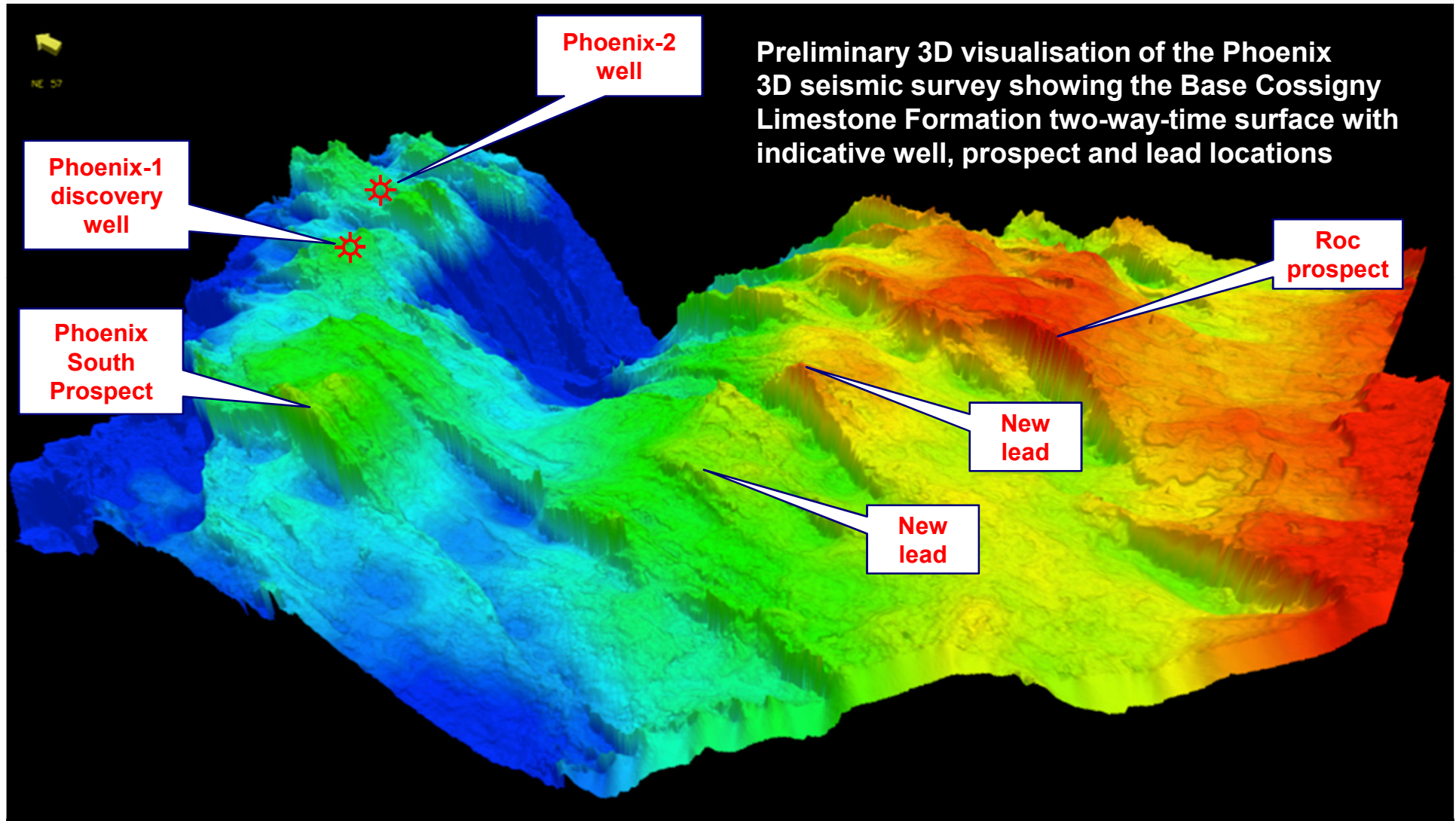
New image from IAN

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

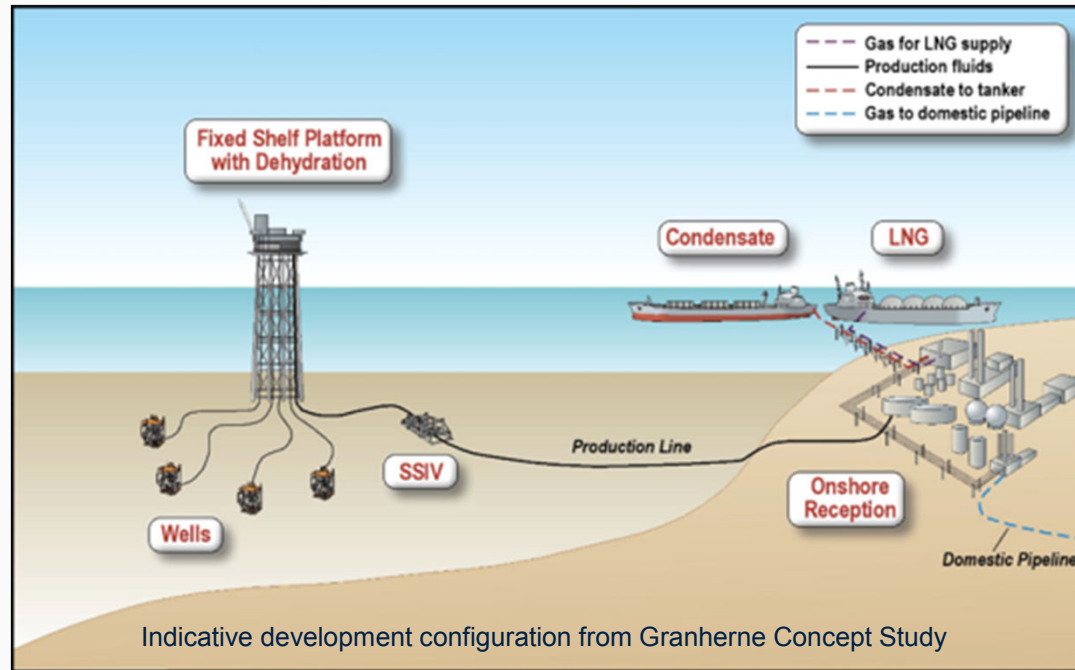


- ❑ Prospect sizes are significant and range from 0.5 to 3.0 Tcf of recoverable gas.
- ❑ Drilling to focus on prospects in 3D survey & on trend with Phoenix gas discovery
- ❑ Drilling likely in water depths of around 140m, similar to Phoenix-1 and 2 wells.
- ❑ Well depths similar to the Phoenix-1 and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

First images from the 3D seismic data set



Development – standard configuration

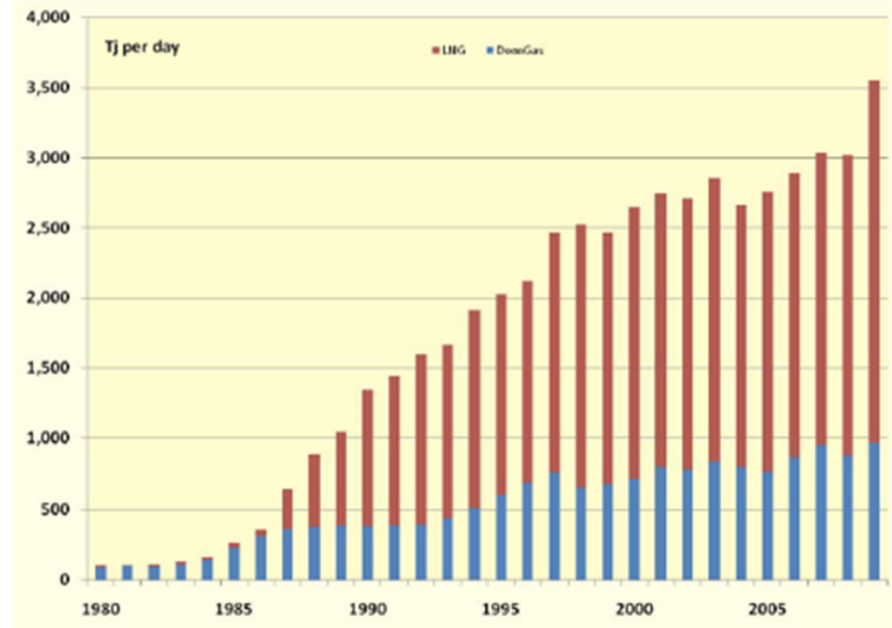


Planning for:

- ❑ 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.

Markets – strong regional demand

- ❑ Asian LNG demand growing rapidly.
- ❑ Western Australian gas demand also growing & remains an important source of energy for the State.
- ❑ Potential gas supply / demand gap being projected by WA Government.
- ❑ Phoenix is close to existing domestic gas pipeline infrastructure at Port Hedland.
- ❑ Phoenix also relevant to LNG projects in the area.



Source: Department of Minerals and Petroleum, Quantity and Values

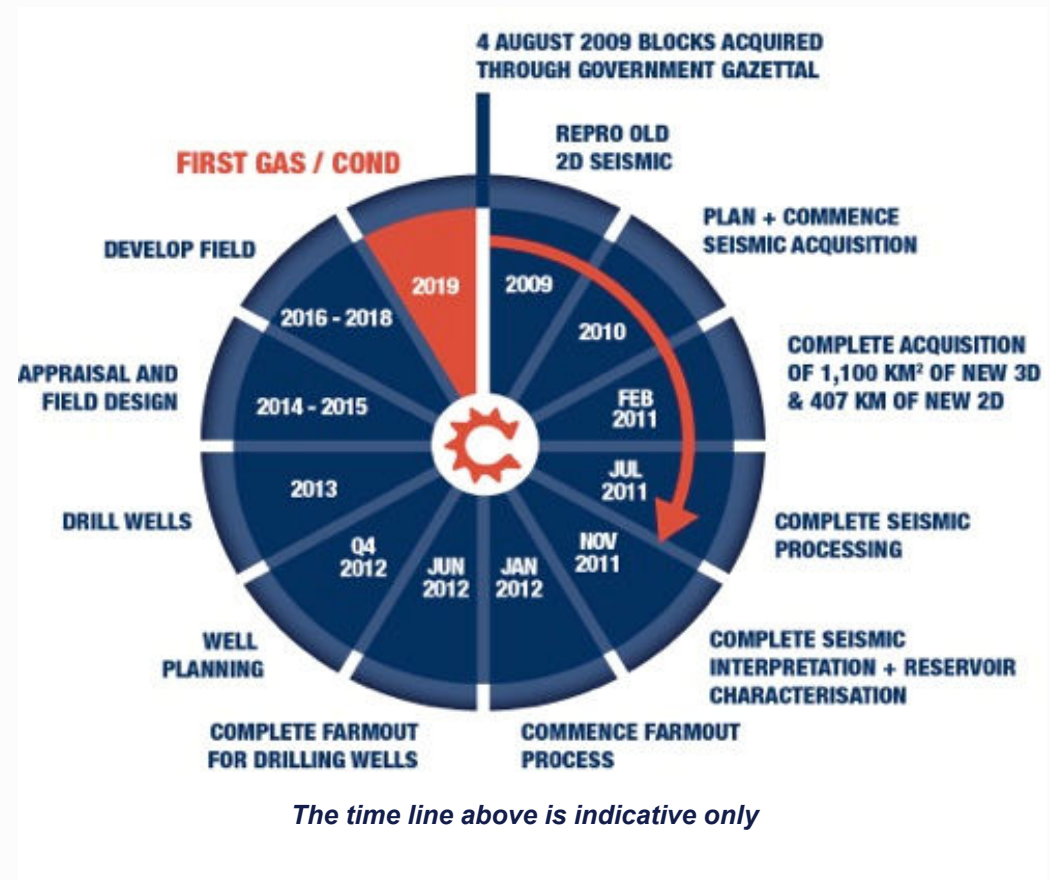
NEWS THIS WEEK...

Rising demand

Rapidly growing energy demand across Asia has resulted in countries looking to each other and to the rest of the world as they seek greater energy security.

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.



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