



**CARNARVON**  
PETROLEUM LTD

## Investor Presentation

January / February 2017



CVN



The Resource estimates outlined in this report have been prepared by the Company's Chief Operating Officer, Mr Philip Huizenga, who is a full-time employee of the Company. Mr Huizenga has over 25 years' experience in petroleum exploration and engineering. Mr Huizenga holds a Bachelor Degree in Engineering and a Masters Degree in Petroleum Engineering. Mr Huizenga is qualified in accordance with ASX Listing Rules and has consented to the form and context in which this statement appears.

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## Overview

- **NEW North West Shelf (“NWS”) hydrocarbon basin uncovered**
- Play previously thought too deep / tight, now significantly de-risked
- Carnarvon provides the only ASX listed exposure to this acreage
- Market value of Carnarvon is around \$100 million (ASX code: CVN)
- Carnarvon has \$60 million of cash as at 31 December 2016

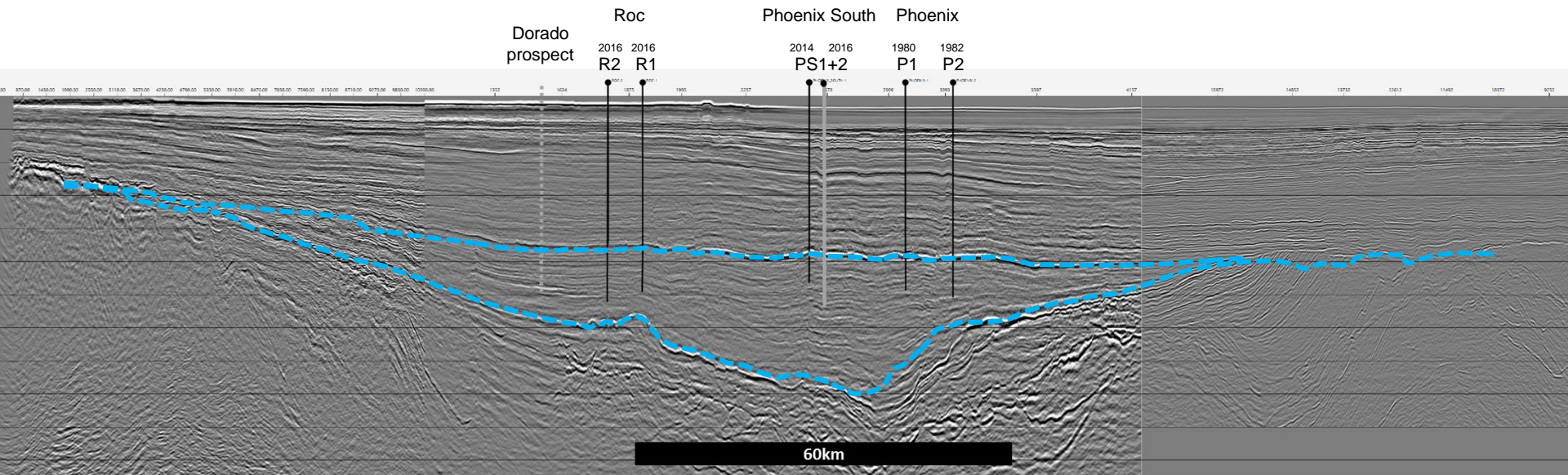


# NWS' most exciting exploration acreage



## Phoenix / Roc permits

- **FOUR discoveries from four wells drilled by Carnarvon and partner**
- Commercial flow rates achieved, comparable with major NWS fields
- Entire hydrocarbon province covers a very large ~22,000km<sup>2</sup>
- Carnarvon and partner hold all the acreage covering this basin



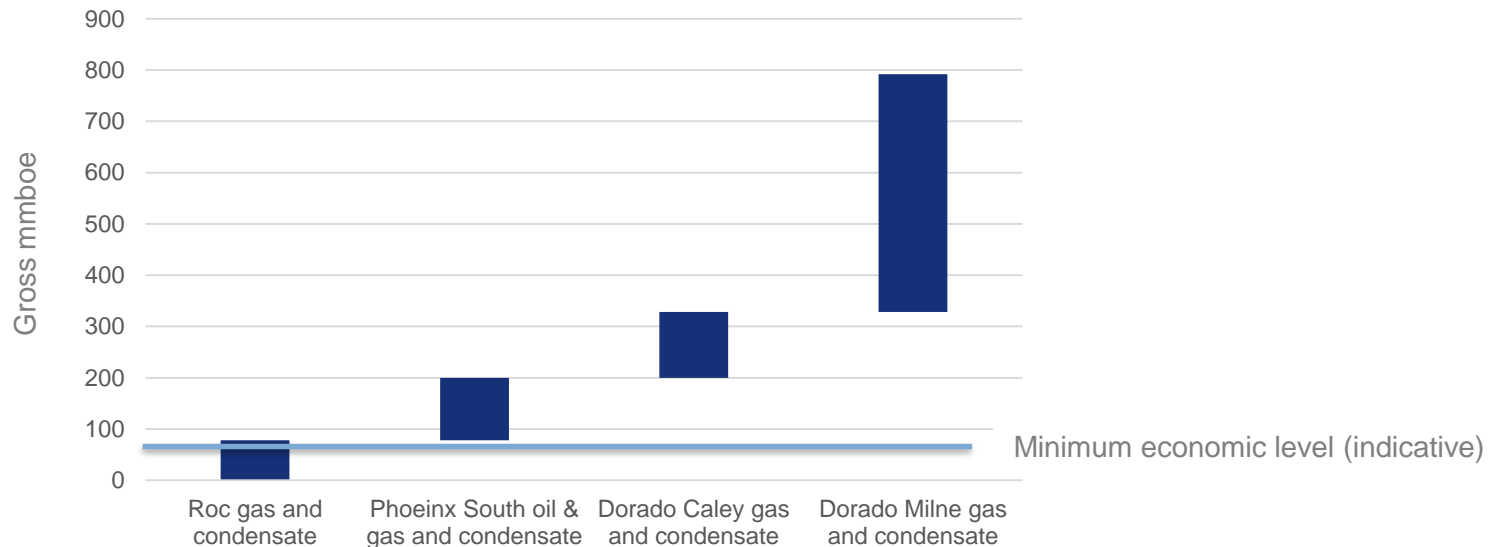
Seismic image across the Bedout Sub-basin

# Commercial project taking shape



## Phoenix / Roc permits

- **Multi-Tcf gas potential in a small tested area of the acreage**
- **Remaining area has similar high potential**
- High proportion of condensate in all gas samples recovered
- Engineering and commercial work commencing in 2017
- Key resources are capable of being centrally produced



Three key resource estimates, mid case / 2C basis

# Stop: how did we get to this point?



## Phoenix / Roc permits

- 2009 Carnarvon secures interests in 4 permits in Government gazettal
- 2011 play opening 3D seismic acquired, the first 3D in the basin
- 2012 Apache Energy and JX Nippon farm in paying for two wells
- 2014 Phoenix South-1 discovered and recovered light oil
- 2015 / 2016 Roc-1 discovered and recovered gas and condensate
- 2016 Roc-2 discovered and **flowed** gas and condensate
- 2016 Phoenix South-2 discovered and recovered gas and condensate



# Roc-2 well delivered an historic flow



## Phoenix / Roc permits

- Roc-2 well flowed strongly for 6 days under controlled test conditions
- At 51 million scf per day of gas and 2,943 barrels of condensate per day, being a high condensate to gas ratio of 58 bbls/mmscf.
- Production equivalent rate ~10% of the WA domestic gas usage

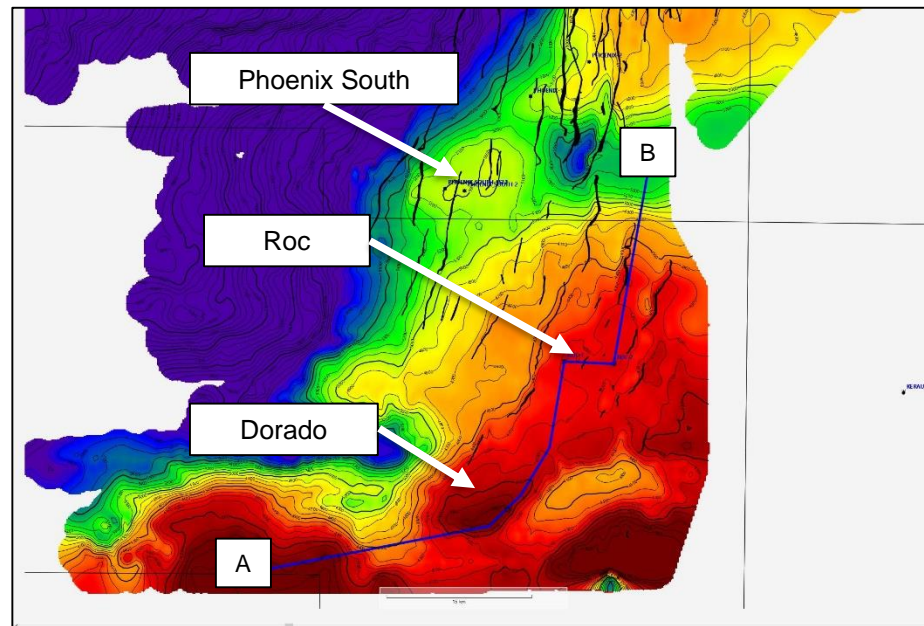


# Dorado prospect is the biggest target yet



## Phoenix / Roc permits

- Dorado is ~15 kilometres from Roc
- Roc-2 flowed gas and condensate at commercial rates
- Dorado is updip from Roc, and hydrocarbons migrate upwards
- Dorado structure clear on 3D seismic and many times larger than Roc



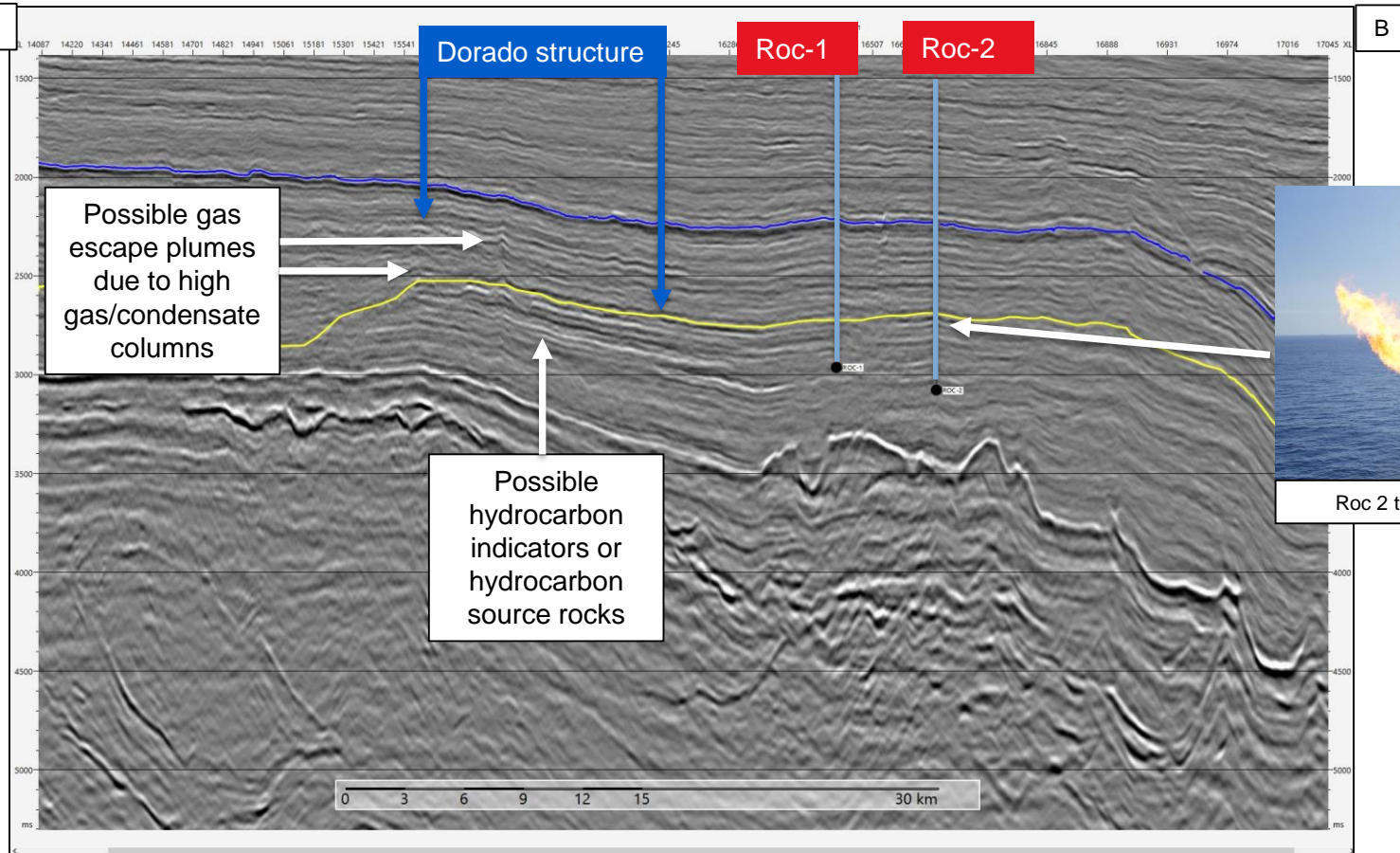
Line on Top Caley Depth Structure Map (CI=100m)



# Dorado is the biggest target yet



Phoenix / Roc permits



Roc 2 tested upper sands in the Caley Fm.

Seismic image of Caley sst horizon

# Phoenix South-2 potentially uncovered a play fairway



## Phoenix / Roc permits

- High gas influx and pressures experienced while drilling PS-2 Caley Sst
- Pressure positive for porosity (higher volume) and permeability (higher flow rates)
- High probability of sand prone reservoirs from seismic and regional mapping
- Potential for multiple sealed sand packages filled with hydrocarbons generated from shales within the package; versus structural trap targeted pre-drill

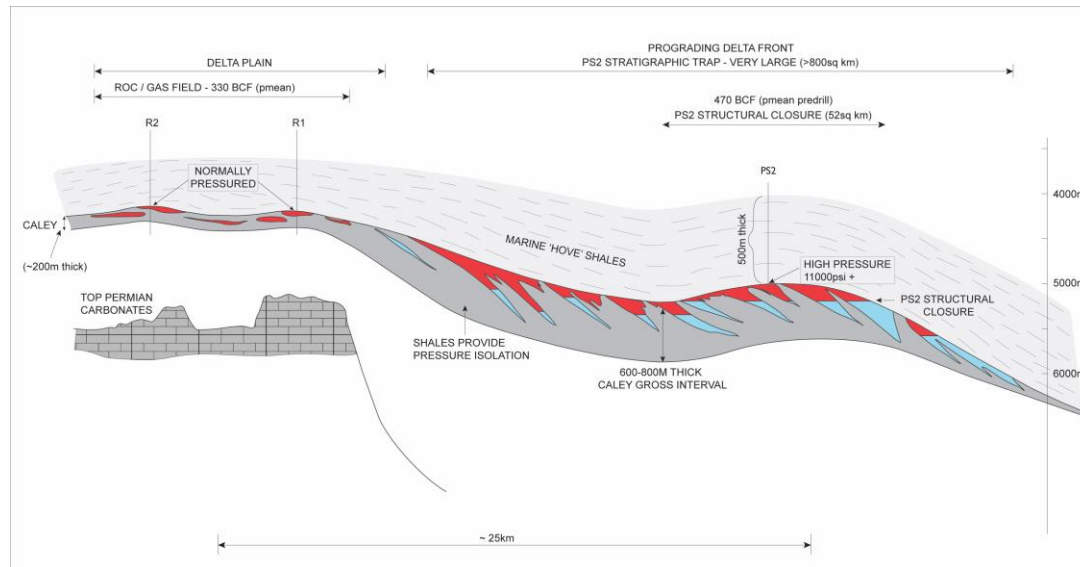


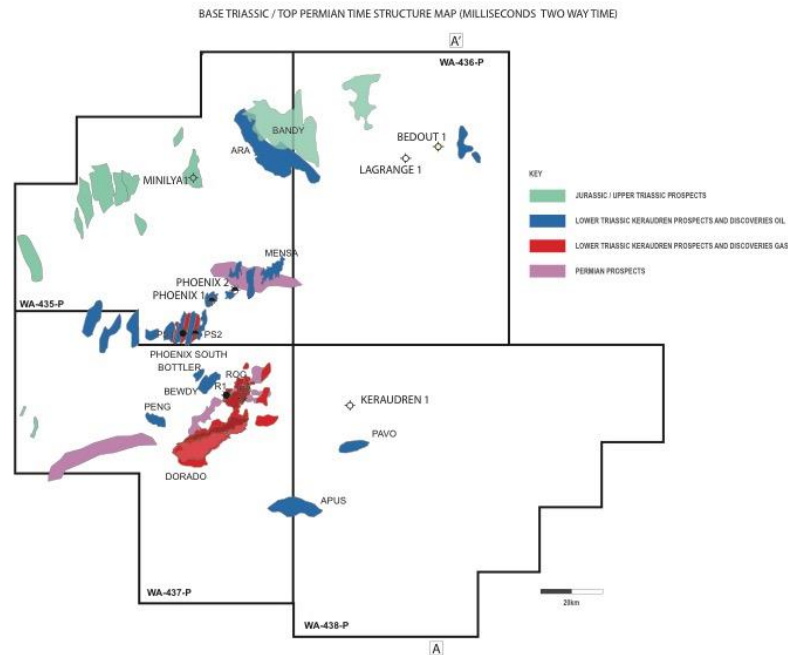
Illustration of Phoenix South-2 high pressure basin centred play

# More hydrocarbons in opportunity rich basin



## Phoenix / Roc permits

- Opportunity rich basin with substantial 3D seismic coverage
- Enormous volume potential with new prospects being continually worked up
- Significant intellectual property value in this play system
- With play potential across the broader NWS – a key differentiator of value



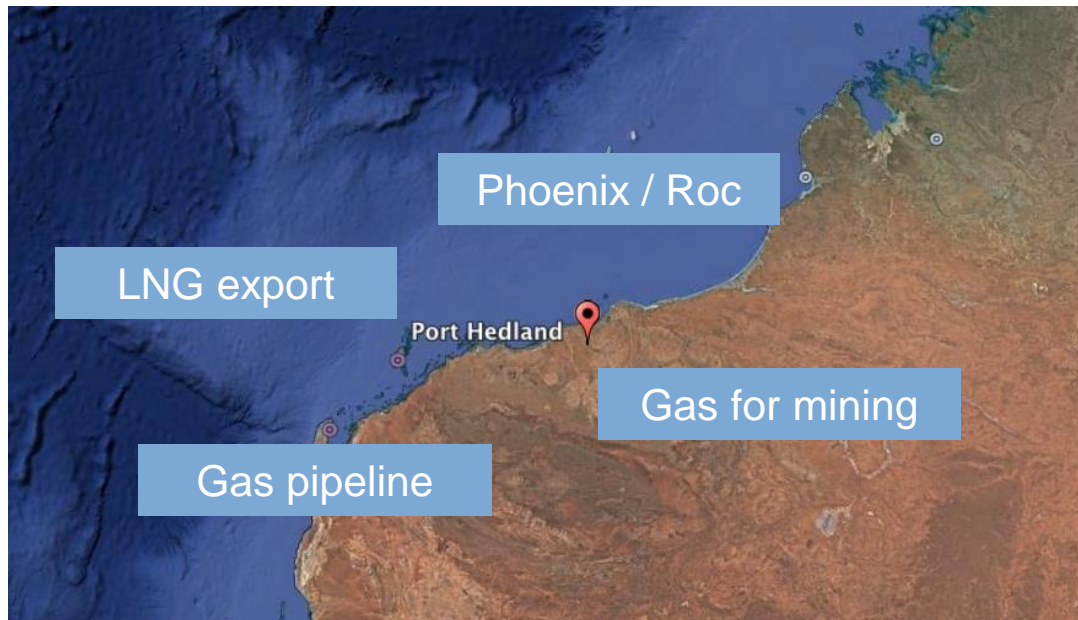
Prospects identified to date

# Location strategically important



## Phoenix / Roc permits

- Phoenix and Roc discoveries lie ~160 kilometres offshore of Port Hedland
- WA's main gas pipeline passes Port Hedland
- Fortescue River Gas Pipeline links main gas pipeline to Pilbara iron ore mines
- LNG export facilities expected to have spare capacity from 2020
- WA demand for gas projected to exceed supply from 2020

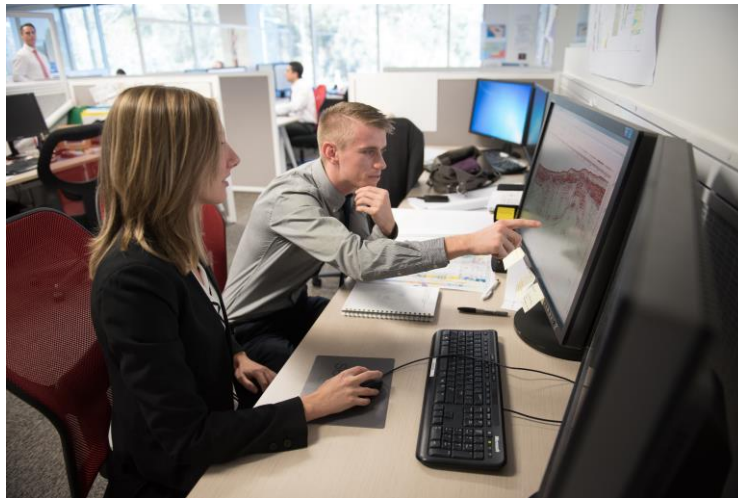


# But wait, there's more



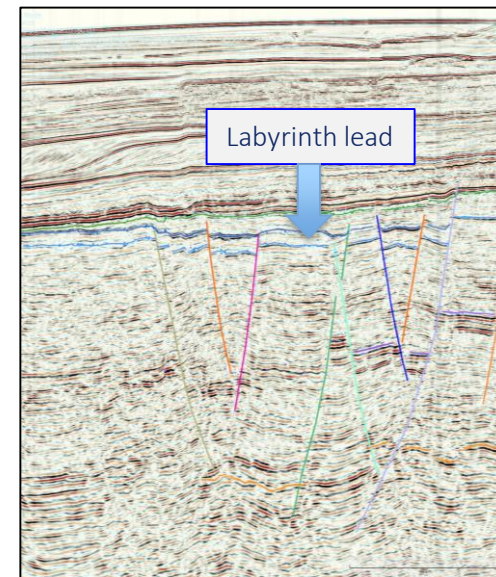
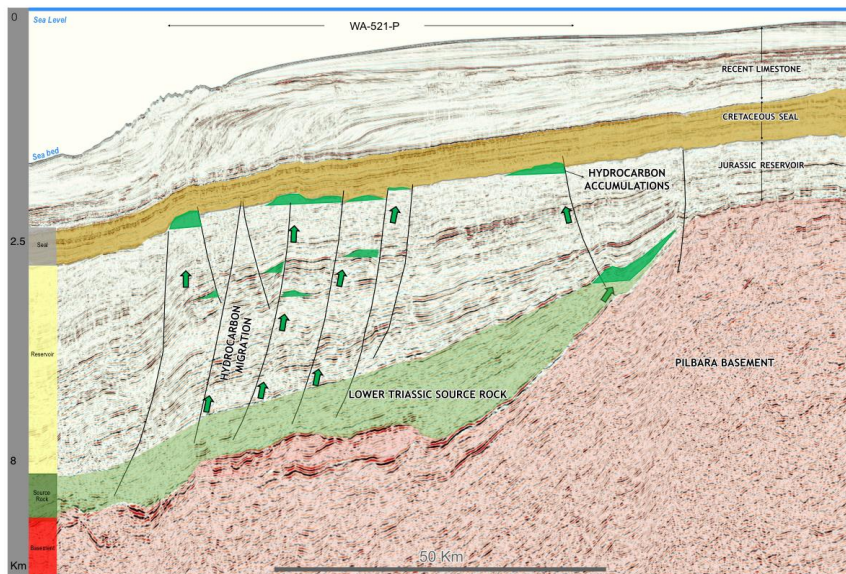
## CVN's business model

- Carnarvon holds an additional 8 exploration permits
- Objective being:
  - Complete technical work to identify oil and gas prospects to drill
  - Attract partners with capabilities to drill exploration wells
  - Receive partner contributions toward well costs
  - Make and commercialise discoveries to create value for shareholders



Carnarvon technical staff at work

- Buffalo – latest technologies being run on 3D data in this proven oil province
- Maracas – plan to run latest 3D technologies over key prospects
- WA-521 – very large leads identified on 2D, requires 3D to refine
- Cerberus – Phoenix / Roc like plays awaiting interested partner to drill
- Outtrim – 2016 oil discovery, an aggregation play with nearby discoveries



Example of concept to lead generation in WA-521-P

## Where we see value

- Volume update(s) following Phoenix South well result and ongoing work
- New prospect identification (e.g. Dorado prospect didn't exist 12 months ago)
- Dorado well targeting large volumes in 2017 (subject to JV approvals)
- Field development planning for Phoenix / Roc including project economics
- Commercial transactions such as divestments, farm-outs and acquisitions



2016 Roc-2 flow test  
(click on image for video)







**Think Different**

**Act Different**