### **Corporate Presentation**

1 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, to investors in Hong Kong and Singapore as part of the Macquarie Securities arranged "Australia and New Zealand Corporate Day".

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

Adrian Cook

**Managing Director** 

**Carnaryon Petroleum** 





# Investor Presentation 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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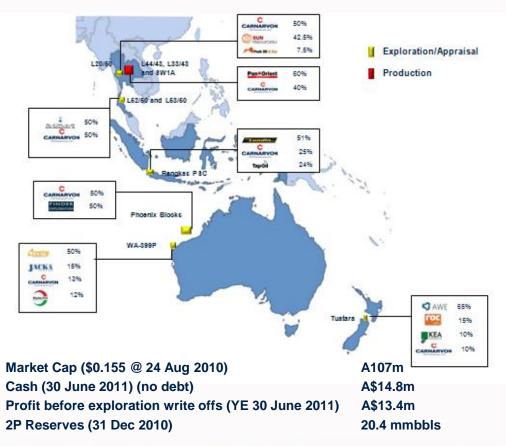


# **Corporate Overview**

# **Corporate Strategy & Overview**

- Our strategy is to build a profitable company, from a diversified portfolio of exploration & production assets, which creates value for our shareholders over the long term
- Carnarvon currently has low cost, high margin, oil production in Thailand
- Carnarvon is investing for growth in new oil & gas production and exploration projects

| Current assets     | Status of each asset  |
|--------------------|---|
| L44 & L33          | Continuous drilling of 25-35 wells per year covering production & reserves.         |
| Phoenix blocks     | Completing 3D seismic interpretation; then farm-out for drilling high impact wells. |
| Rangkas PSC        | Interpreting new seismic data   |
| L52/50 &<br>L53/50 | Currently acquiring new seismic data  |
| L20/50             | Assessing new information to determine forward program                              |
| WA-399-P           | Processing new 3D seismic data  |
| Tuatara            | Assessing whether there is any further exploration potential                        |



#### Performance and Track Record

Production

- Production from fractured volcanic reservoirs in Thailand continues to be highly variable
- Carnarvon has converted reserves to production historically, recent production volatility has raised some concerns over conversion rates and growth in production

 Develop plan for sandstone reservoir
 Continue to drill Volcanic reservoirs

Reserves

- Some recent downgrades, but Carnarvon has a significant reserves position
  - Carnarvon has increased reserves from 3mmbbls to 20mmbbls since 2006
- Gaffney Cline and Associates annually certify the operator's reserve estimates

❖ Maintain ongoing appraisal and exploration drilling in L44/43 & L33/43

Exploration

- Phoenix promising with prospects up to 3 Tcf (unrisked) around existing gas discoveries
- ❖ Apache farmed into and acquired new 3D over WA-399-P, now processing data
- ❖ Indonesian acreage advancing with seismic indicating several large oil prospects
- Thailand exploration promising in L44/43, L33/43, L20/50, L52/50 & L53/50

❖ Steadily progress toward drilling Phoenix, Rangkas, L52&53, L20/50 & WA-399-P

Growth

- Building core region of competence in Thailand with addition of new exploration acreage
- ❖ Diversifying asset base via Indonesian and Western Australian exploration assets
- Assessing acquisitions that add value for shareholders

 Proactively assess opportunities in exploration and producing assets

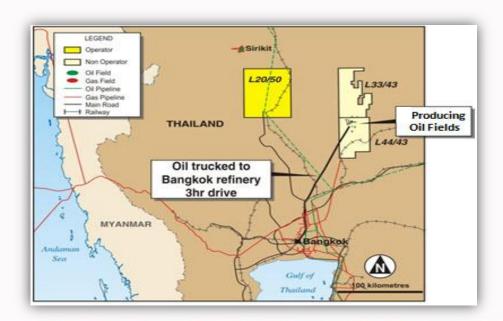


### **Thailand Production Asset**

### **Overview**

#### L44/43 and L33/43 Concessions reside in a highly prospective basin in Thailand

- Oil is present in most wells drilled.
- Flow rates vary significantly
  - 2011 financial year high of 15,000 bopd field capacity.
  - 2011 financial year low flow rate of 2,500 bopd.
- Low cost and scalable operations profitable at low flow rates / oil prices.
- Continuous drilling operations with low cost wells, typically \$1.0m to \$1.5m each (sandstone wells as low as \$0.5m).

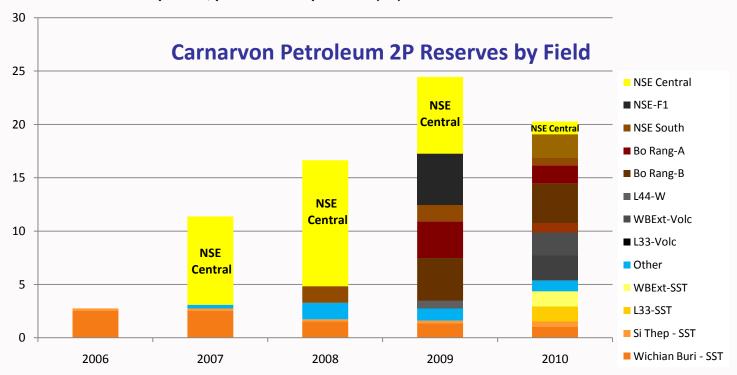




# 2P Reserves – analysis by field (net to CVN)

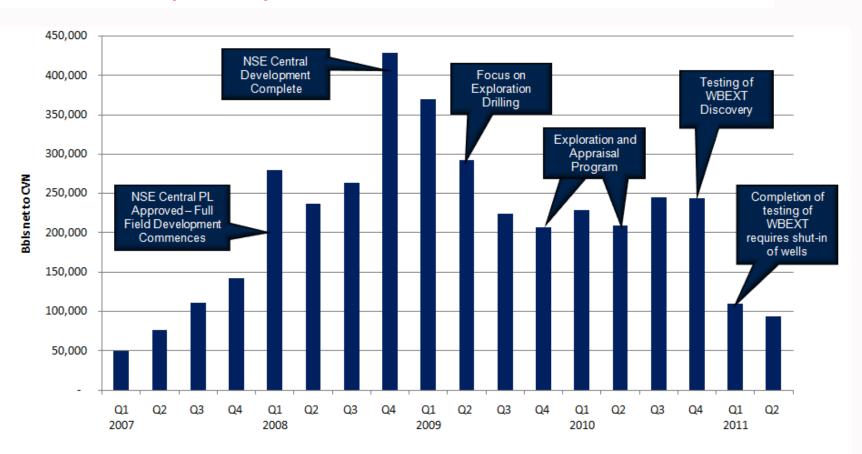
Reserves are diversified across multiple producing fields
Reserves are also contained in volcanic and sandstone reservoirs

- ❖ 4.7 mmbbls proved (1P);
- 20.4 mmbbls proved and probable (2P); and
- ❖ 51.9 mmbbls proved, probable and possible (3P)



#### **Production**

Oil is present in low cost, highly scalable operations Production variability will always exist in fractured volcanic reservoirs



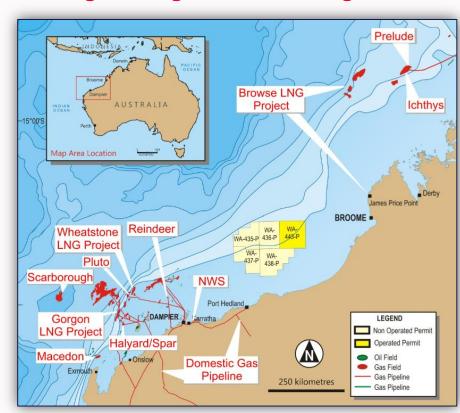


# **Exploration Portfolio**

#### Phoenix – Western Australia

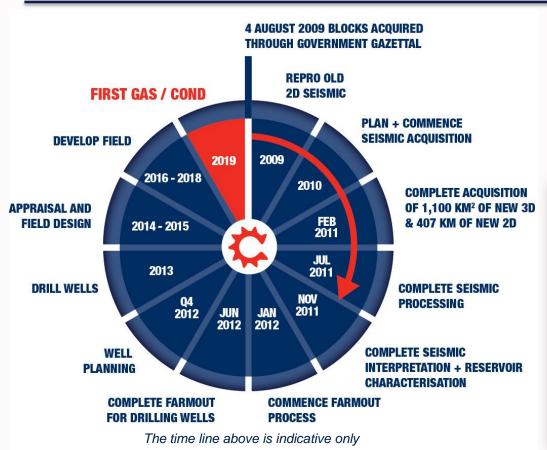
#### Significant value potential with material interests, large acreage & discovered gas

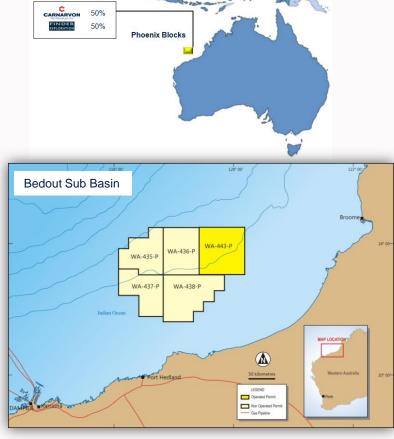
- Carnarvon holds substantial interests in 5 key Permits covering the Bedout Sub-basin north of Port Hedland.
- The 5 permits cover a significant 28,300km² containing existing gas discovered and a large number of prospects and leads derived from reprocessed 2D seismic data and a new 3D seismic data set.
- The initial focus will be in the lower risk WA-435-P and WA-437-P Permits containing the discovered gas.
- Drilling success in the Phoenix 3D area would likely enhance opportunities in the WA-436-P, WA-438-P and WA-443-P Permits.
- Prospects and leads have the potential to include material gas volumes recoverable and possible condensate.
- Commercialisation alternatives through the domestic gas network or supporting an LNG project.



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

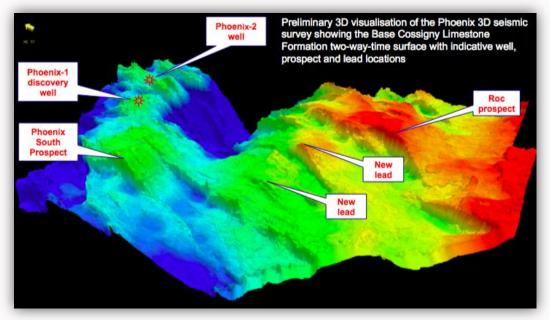
### Phoenix – Western Australia





#### Phoenix – Western Australia

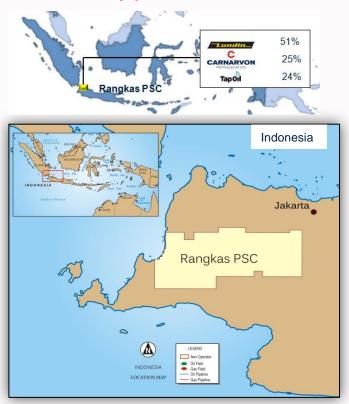
The Phoenix asset has the potential to generate material value for shareholders and with a high level of interest in the asset, value may occur sooner than planned.

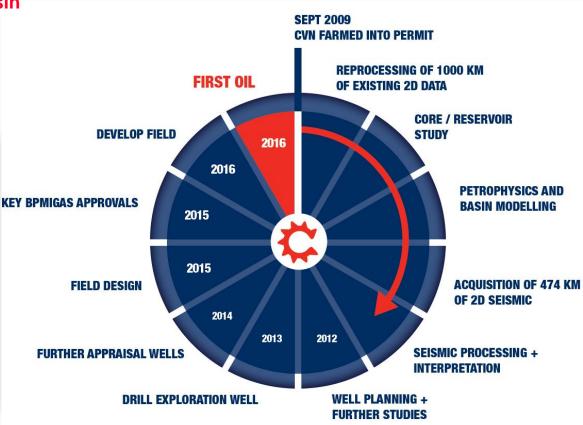


- Gas discovered at Phoenix 1 & 2 wells by BP in 1980 and 1982 respectively
- New data the joint venture has acquired and processed a large 1,100km² of 3D seismic data over the WA-435-P and WA-436-P Permits including the Phoenix-1 gas discovery.
- The preliminary 3D data supports several multi Tcf recoverable prospects. Well log data and regional assessments also suggest potential for condensate
- Strong demand for gas exists in this region

# Rangkas PSC - Indonesia

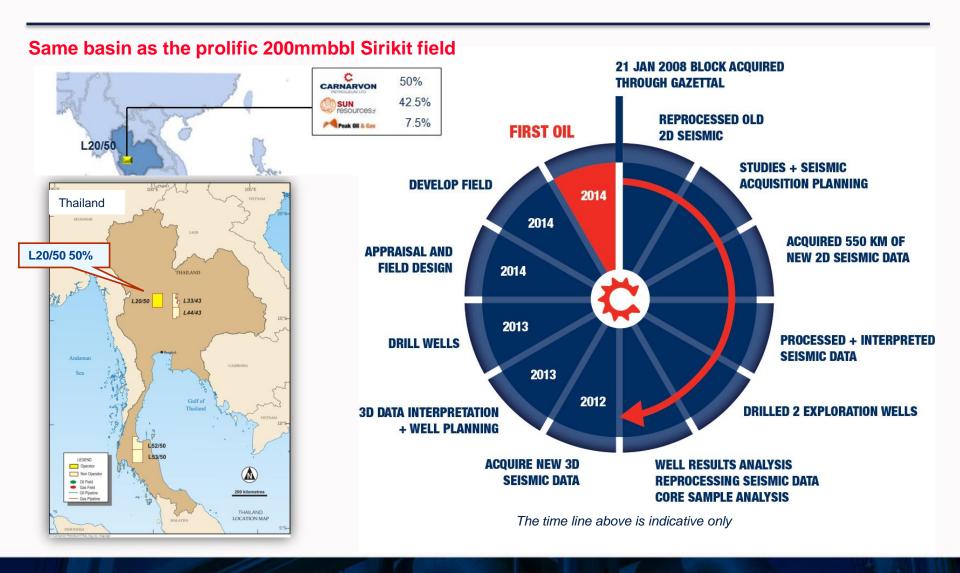
#### Part of a very productive NW Java Basin





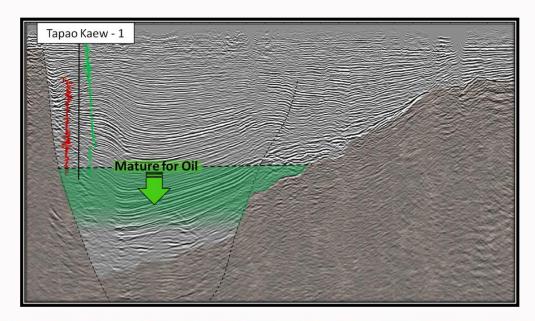
The timeline above is indicative only

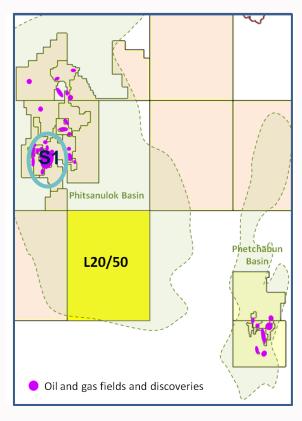
### L20/50 Concession - Thailand



### L20/50 Concession - Thailand

- The presence of a working petroleum system has been de-risked by geochemical analyses of samples from recent wells
- Potentially good source rocks were penetrated by both Krai Thong-1 and Tapao Kaew-1 wells with oil-mature organic matter in the base of Tapao Kaew-1
- Recent successful drilling by PTTEP and MOECO in blocks to the north
- ❖ L20/50 is an extension of the same Basin and is on trend with the Sirikit Field, Thailand's biggest onshore oil field





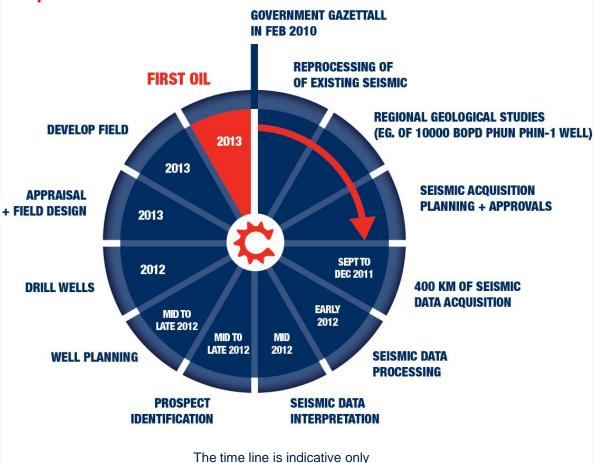
"Total output from the S1 (Sirikit) field, since operations started in 1981, is expected to reach 200 million barrels next year.

"The Nation, Kamphaeng Phet, July 20, 2010

### L52/50 & L53/50 Concessions - Thailand

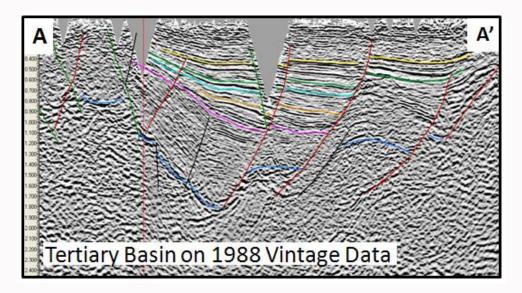
#### Early phase exploration in an under-explored basin close to successful offshore fields

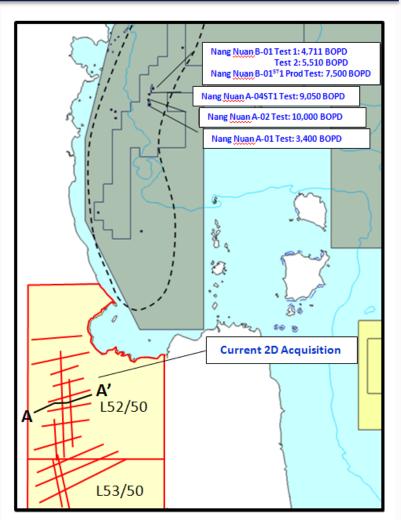




### L52/50 & L53/50 Concessions - Thailand

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





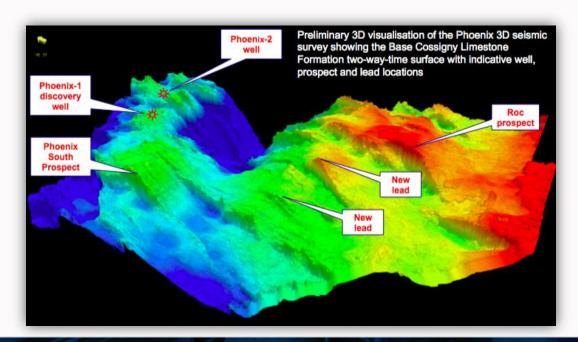


### Conclusion

### **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 from exploration (current portfolio & new assets) and from sensible acquisitions.





# **Annexure of Supplementary Material**

# **Broker's perspectives**

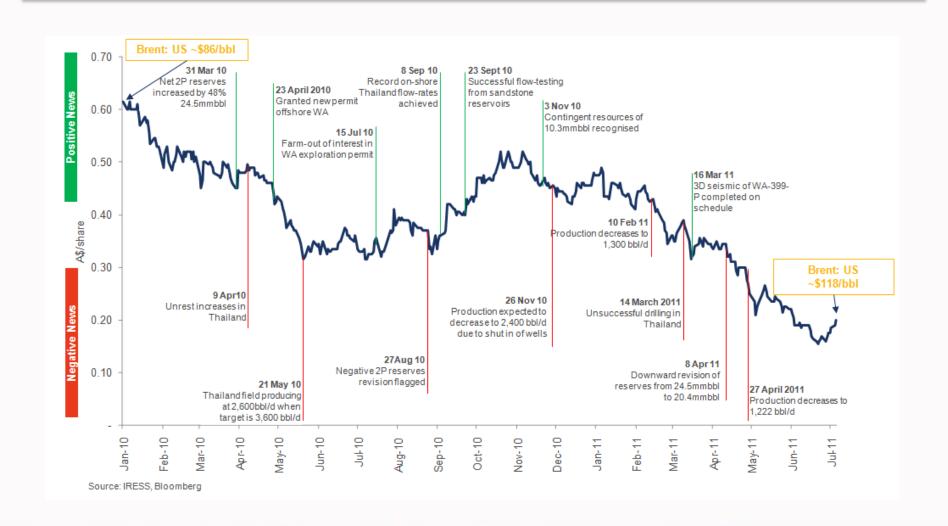
#### Brokers see significant upside from the current share price

- initially as a production turnaround situation then from exploration
- Potential catalysts identified for a share price rerate include
  - Strong results from Thailand volcanic reservoir focused drilling program
  - Consistent delivery of solid production results from Thailand sandstone reservoir focused drilling
  - Strong interest by Majors in Phoenix asset
  - Attractive appraisal/development acquisitions

| Broker                   | Macquarie  | Southern<br>Cross | Hartleys   | Euroz<br>Securities | Baillieu  | Austock   | Average |
|--------------------------|------------|-------------------|------------|---------------------|-----------|-----------|---------|
| Date                     | 18-May-11  | 27-Jun-11         | 23-May-11  | 11-May-11           | 05-May-11 | 28-Apr-11 |         |
| Valuation (A\$/share)    | 0.65       | 0.33              | 0.49       | 0.26                | 0.40      | -         | 0.43    |
| Target Price (A\$/share) | 0.50       | 0.33              | 0.40       | 0.26                | 0.40      | 0.40      | 0.38    |
| Recommendation           | Outperform | Buy               | Accumulate | Hold                | Buy       | Buy       |         |

Source: Broker Reports

### **Share Price Performance**



### Shareholder base

- Carnarvon has a predominantly retail investor base with almost 10,000 shareholders
- Whilst there are a number of high quality institutions on the register, no institution holds greater than 5% of Carnarvon's issued capital
- Directors and employees hold around 11%



#### Beneficial share register analysis

| Investor                            | 30 Jun 11 |
|-------------------------------------|-----------|
| Directors/Employees/Related Parties | 10.9%     |
| Blackrock                           | 2.5%      |
| Independent Asset Mgt               | 2.4%      |
| Contango Asset Mgt                  | 1.8%      |
| Adam Smith Asset Mgt                | 1.6%      |
| Paradice Investment Mgt             | 1.6%      |
| Royal Bank of Scotland              | 1.5%      |
| Dimensional Fund Advisors           | 1.4%      |

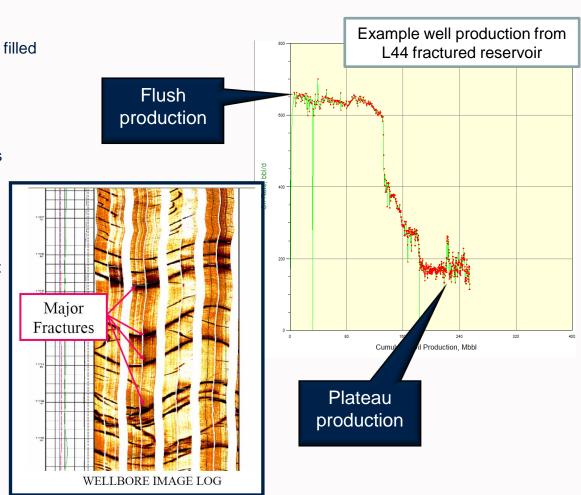
Source: Orient Report, 30 June 2011

| Holding size      | Number of<br>Shareholder<br>s |  |  |
|-------------------|-------------------------------|--|--|
| Size of Holding   |                               |  |  |
| 1 to 1,000        | 561                           |  |  |
| 1,001 to 5,000    | 2,420                         |  |  |
| 5,001 to 10,000   | 2,100                         |  |  |
| 10,001 to 100,000 | 4,141                         |  |  |
| 100,001 and over  | 655                           |  |  |
| Total Holders     | 9,877                         |  |  |

Source: 2010 Annual Report

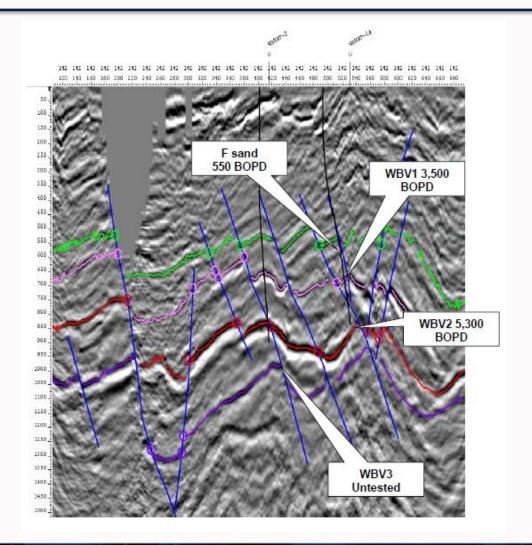
### **Fractured Reservoirs in Thailand**

- L33, L44 & SW1A contain multi layered oil filled fractured reservoirs
- Massive lost circulation no returns over reservoirs
- Heterogeneous nature of fracturing means individual well performance varies:
  - 100,000 bbls to 1.5 million bbls per well
  - Potential for infill locations
- Fracturing also results in varying water cut



### **WBEXT Area in Thailand**

- Multiple, stacked pay zones in volcanic and sandstone reservoirs
- Multiple fault compartments that require a large number of wells to define reserves
- Recent successes resulting in excellent flow rates
- Highest flow from sandstone of 550 bopd from WBExt-1
- Highest flow from a volcanic of 5,300 bopd from WBExt-1A



# Thailand's SRB Explained

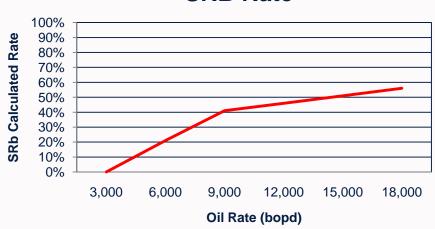
#### Sliding scale 0% to 75% on profit before income tax

- Thailand III regime
- Designed to tax 'excessive profits'
- Applied to each concession area
- Paid annually
- Sliding scale from 0% to 75%
- Higher profit = higher SRB rate

| Baht per<br>metre<br>(From) | Baht per<br>metre<br>(To) | Rate<br>per<br>baht<br>metre | Effective S<br>(from) | RB<br>(to) |
|-----------------------------|---------------------------|------------------------------|-----------------------|------------|
| 0                           | 4,800                     | 0                            | 0                     | 0          |
| 4,801                       | 14,400                    | 240                          | 0                     | 40%        |
| 14,401                      | 33,600                    | 960                          | 40%                   | 60%        |
| >33,601                     |                           | 3840                         | 60%                   | 75%        |

Source: Hartley's, Department of Mineral Fuels, Thailand

#### **SRB Rate**

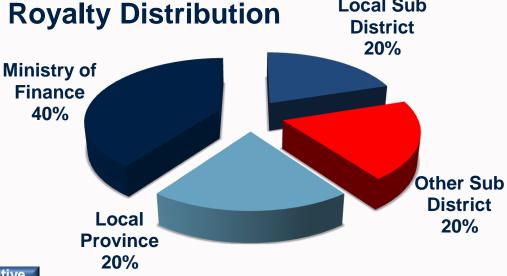


# Thailand's Royalty Explained

#### Sliding scale 5% to 15% on profits before SRB and income tax

- Thailand III regime
- Royalty is applied over each concession area
- Sliding scale from 5% to 15% based on production levels
- Paid on a monthly basis
- Deductible for SRB and corporate tax purposes

| Barrels per Day<br>(From) | Barrels per<br>Day (To) | Tiered<br>Royalty<br>Rate | Effective<br>Royalty<br>Rate |
|---------------------------|-------------------------|---------------------------|------------------------------|
| 0                         | 2,000                   | 0.0500                    | 5                            |
| 2,001                     | 5,000                   | 0.0625                    | 5.0-5.8                      |
| 5,001                     | 10,000                  | 0.1000                    | 5.8-7.9                      |
| 10,001                    | 20,000                  | 0.1250                    | 7.9-10.2                     |
| >20,000                   |                         | 0.1500                    | 10.2-15.0                    |



Local Sub

Source: Hartleys, Department of Mineral Fuels, Thailand



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