# **Investor Presentation**

July 2006

Drilling Commences at Wichian Buri



Carnarvon Petroleum Limited - CVN



## OVERVIEW OF CARNARVON

- Generating cashflow from Wichian Buri oil field in Thailand (40% CVN):
  - 14.2 MMBO gross recoverable oil Carnarvon net 5.68 MMBO.
  - Current gross production of 75 BOPD Carnarvon net revenue March 2006 quarter A\$\$58,000.
     (upgrades to capital equipment have commenced)
- Aggressive drill programme consisting of 6 development wells currently being drilled, with up to another 20 wells budgeted to start late this year, targeting increased reserves and production in L44/43 and exploration in L33/43.



- Strong working relationship with TSX listed Pan Orient, a well funded company with excellent management and technical credentials.
- Experienced and energetic management team with track record of successful oil and gas operations.
- **Opportunity**: Focus on immediate production and exploration opportunities at Wichian Buri with other asset opportunities being investigated.





## STRUCTURE AND PERSONNEL

Capital Structure:	Shares on issue (ASX : CVN) :	412 million
	Options on issue (7 & 10c):	22 million
Market Cap:	at 5.5c / share :	\$22.6 million
Cash on hand:	30 June 2006 :	\$1.5 million*
Shareholders:	Directors & Management :	10.8%
	Top 20 holding :	33.87%

<sup>\*</sup> Doesn't include \$350,000 refund Govt bond

### **Board of Directors**

### Chairman: Peter Leonhardt

- Chairman of Voyager Energy
- Chartered Accountant, held position as Managing Partner of Coopers and Lybrand, Perth

### CEO: Ted Jacobson

- Petroleum geologist/geophysicist with 36 yrs experience
- Co-founder of Discovery Petroleum Ltd
- Co-founder and technical director of Tap Oil Ltd

Non Exec Neil Fearis

Directors: Ken Judge

### **Technical Management**

#### Carnarvon

Ted Jacobson

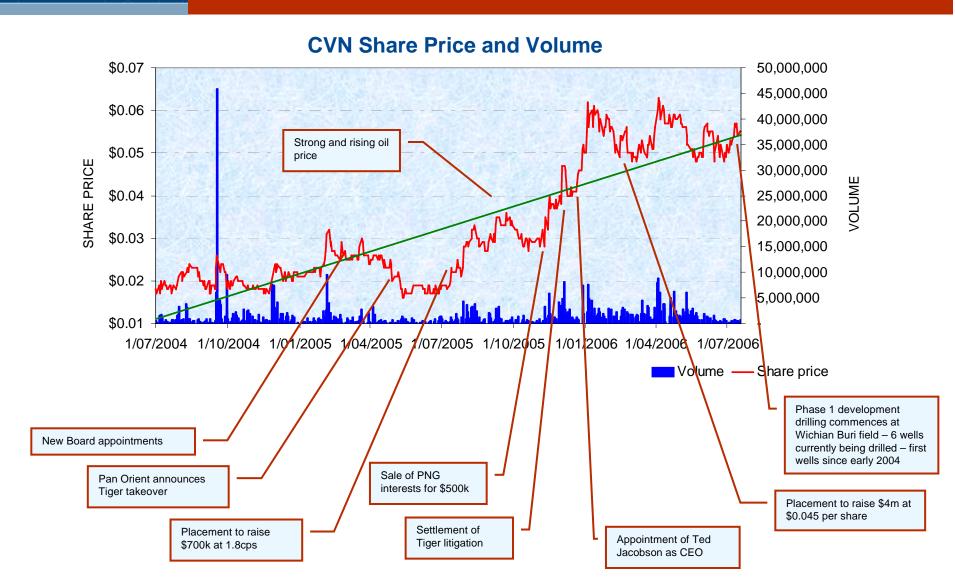
### Pan Orient

- Jeff Chisolm
- Waleed Jazrawi
- Gerry Macey
- Cam Taylor
- Ian Halstead





## SHARE PRICE PERFORMANCE







### **Primary focus: Thailand**

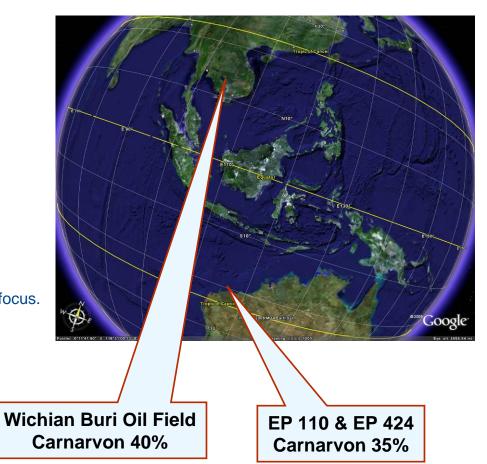
- Supportive Thailand Government.
- Good deal flow.
- Favourable fiscal regime.
- Thailand needs oil discoveries.

### **Secondary focus: Australia**

- Stable Government.
- Good fiscal regime.

### Looking for appropriate new ventures

- Won't overlook opportunities outside stated focus.
- Industry contacts important.
- Building Carnarvon's technical strengths.



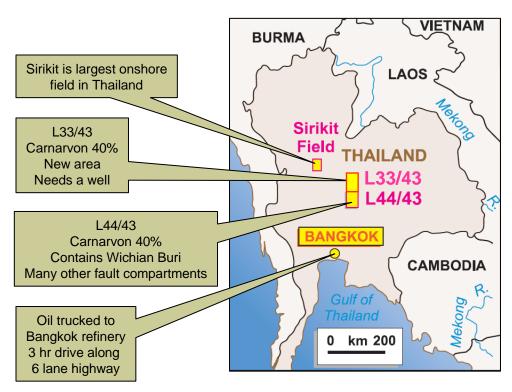


## **PERMITS**

### Wichian Buri, Thailand

L44/43 40% Prov&prob 14.2 million barrels oil recoverable gross to JV.

L33/43 40% Seismic reprocessing indicates good exploration potential.



- ✓ Currently producing around 75 bbls/day.
- 3D seismic survey recently completed and aggressive.
- 2 stage development drilling work commenced.

Stage 1: drilling of 6 appraisal/development wells.

Stage 2: drilling up to 20 wells in and outside production areas with the aim of finding additional reserves and increasing production.

### Carnarvon Basin, Australia

EP110 35% Minimal work to date on this permit

■ EP424 35% 160 km seismic acquired – 20+ million barrel Baniyas Prospect identified

The Company plans to build on this Carnarvon acreage over the next 12 months. This is an area where the company has a substantial technical library and the ability to compete on a sound technical level.



## WICHIAN BURI OIL FIELD

### **Recent Accomplishments**

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- Agreement with Pan Orient to address past JV concerns and provide the platform for a strong working relationship going forward.
- Strong JV relations with competent, well funded operator.
- CVN appoints Ted Jacobson as CEO, brings wealth of industry experience.

- May 2006
- Completion of reserves assessment increases reserves to 14.2mmbo (JV gross).
- June 2006
- Reprocessed 3D seismic identifies production opportunities.
- June 2006
- 3D seismic successfully shot over 225km<sup>2</sup> on Wichian Buri.

- July 2006
- Stage 1 development drilling commences at Wichian Buri.

### **Going Forward...**

- In planning
- Workover program of current producing wells to improve their production profiles.
- October 2006
- Completion of stage 1 development drilling program.
- Targeting primary "F" sands and secondary "G" sands for further growth.

Q3 2006

- Complete processing of the recently acquired 225km² of 3D seismic to identify stage 2 drilling targets.

Q4 2006

- Commence stage 2 drilling – up to 20 wells planned to be drilled commencing later this year.



## WICHIAN BURI OIL RESERVES

### Gross Oil Reserves as of 31 December 2005

	Oil Reserves Gross (mmbo)
Proved Producing	0.037
Proved Undeveloped	0.598
Total Proved	0.635
Probable	13.573
Total Proved + Probable	14.208
Possible (1)	54.55
Total Proved + Probable + Possible	68.758

Source : Gaffney Cline and Associates reserve report dated 31 December, 2005

<sup>(1)</sup> Includes 22.5mmbo gross attributed to concession L44/43 and 7mmbo gross attributed to concession L33/34 but does not include approximately 11mmbo of additional contingent resources



### LEARN FROM THE PAST

- We have experience from similar oil fields elsewhere in Asia.
- We don't have unrealistic expectations for well performance.
- We understand the need to keep things simple.
- We understand the need for better seismic New 3D seismic programme has been completed & old seismic has been reprocessed.
- We employ people with strong experience in similar fields.
- We understand that full development of Wichian Buri will take time and lots of wells.



# ANALOGY

### **DAAN OILFIELD in CHINA**

- Similar oil type.
- Similar production rates for wells.
- Similar geology thin lacustrine sandstones.
- Approx reserves 200+ mmbbls.
- Currently producing from ~ 500 wells.
- Production rate ~ 7,000 bopd.
- Well costs cheap using local materials and constructions.
- IT CAN BE DONE!





# ANALOGY

### SIRIKIT OIL FIELD located northeast of WICHIAN BURI

- Similar geology.
- Same field type better reservoir?
- GT 100 wells.
- Discovered 1981.
- Flowed over 20,000 bopd at peak production.
- Currently still producing over 15,000 bopd.

Can we find good Sirikit type reservoir at Wichian Buri?



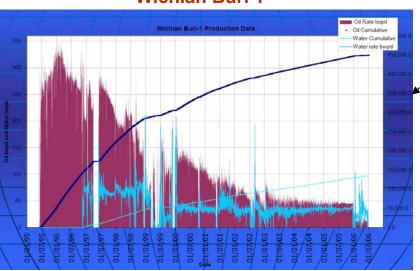
# THE NEW APPROACH

- Vertical holes best for these thin sandstone reservoirs.
- Good wells with minimal damage to reservoir.
  - Minimal logging we know the reservoir and hydrocarbon type.
  - Good mud technology & well design.
  - Run liner and secure well bore as soon as possible minimise formation damage.
- Drill cheaply.
- Drill lots of wells Phase 1 and 2 up to 26 wells only the start of things to come.
- Develop smaller mobile infrastructure to switch between fields.
- Pan Orient General manager and production manager worked for Petrocorp on discovery of Wichian Buri in 1988 – enthusiastic & good managers.



# "F" SAND PRODUCING RESERVOIR WB-1 BEST PERFORMING WELL

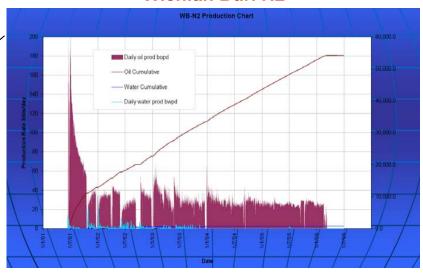
### Wichian Buri 1



11 Years of production

- Wichian Buri-1 (WB-1) has been best performing well.
- Production profile looks normal.
- Commenced production at 300 bopd steadily declining.
- Is it accidental the first well found best reservoir or is it the best drilled and completed well.
- We can learn from this well.

### Wichian Buri N2



**5 Years of production** 

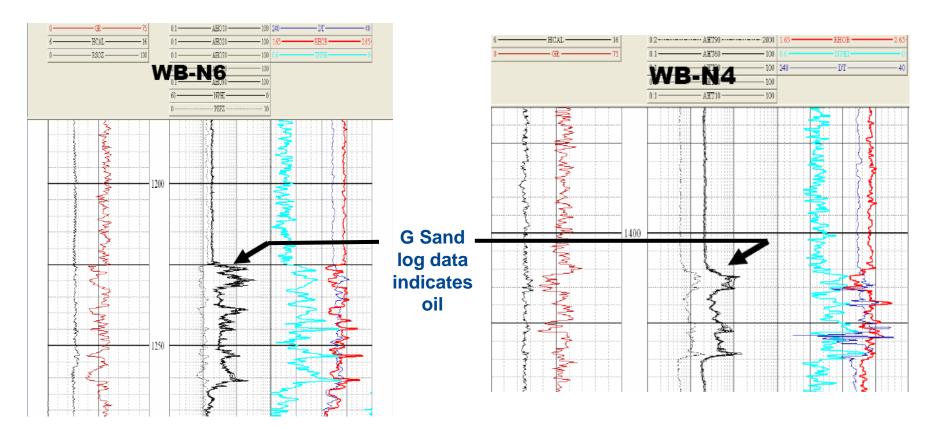
- Wichian Buri-N2 (WB-N2) commenced at 150 bopd rapidly declined to steady state of 30 bopd with minimal water.
- Typical of other best wells.
- Production Profile indicates something wrong.
- Workover being considered.
- POE-2 will be drilled updip of Wichian Buri-N2.



# "G" SAND - DEEPER ADDITIONAL OIL POTENTIAL

G Sand has never been put on an extended production test. WB-N6 and WB-N4 have good log response for oil – will they flow at sustained rate?

All 6 wells of the Phase 1 programme will penetrate the G Sand and will be flow tested if potential moveable oil is indicated on logs.





# POSSIBLE PRODUCTION IMPROVEMENTS

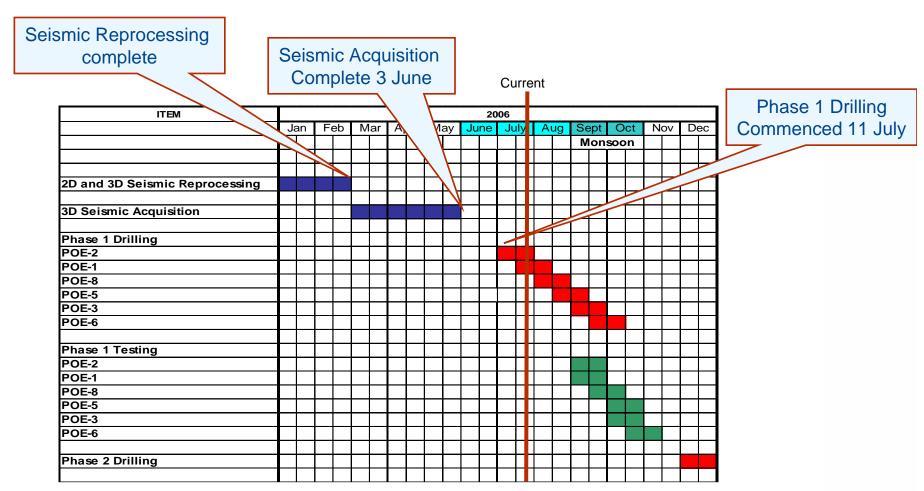
### Scope for production improvement on existing wells

- Production profiles for many wells show unusual character.
- Are perforations optimally placed in reservoir?
- Is there restricted flow through perforations?
- What damage has been done to reservoir?
- Can we improve oil flow from existing wells by re-entering and working over?
- Previous fraccing tests were inconclusive further trials needed.
- Jet pumps are inefficient at LT 250 bbls/day.
- Can we improve some wells by simply replacing with beam pumps? expensive option.
- Many more questions will be addressed by a planned workover programme.
- JV is currently planning a workover programme
- However, immediate focus is phase 1 drilling
- Results of phase 1 will assist planning workover programme





# 2006 OPERATIONS UPDATE



Forward programme is best estimate and subject to revision due to operational delays, Govt approvals and adverse weather.



# PHASE 1 DRILL TARGETS

### **Objective of Phase 1**

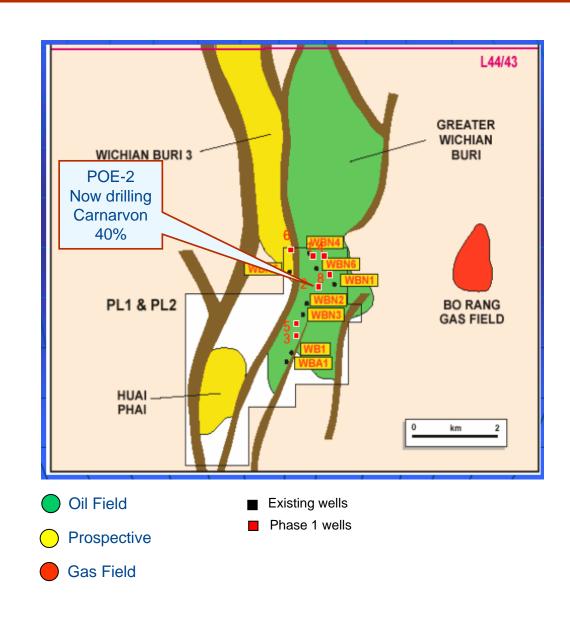
- Oil production
- Cash Flow

### Will provide better understanding of:

- Oil flow rates
- Recovery rates
- Recoverable reserves
- Value to Carnaryon shareholders

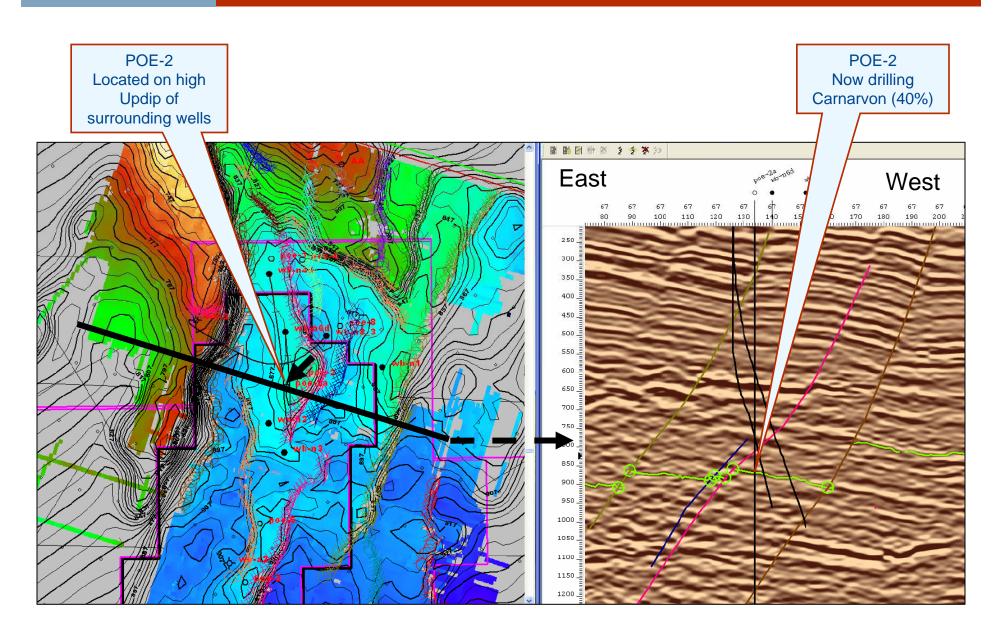
### Location

All Phase 1 wells in close proximity to existing producers





# POE-2 NOW DRILLING





# PHASE 1 - PRODUCTION TESTING POSSIBLE SUCCESS SCENARIO

- 6 production wells being drilled \$1.3m net Carnarvon plus completion @ \$46,000 per well.
- Anticipated success rate 50%.
- Anticipated initial flow rates of 150 bopd from each well.
- Production testing 1 month each well.
- Anticipated total production for 3 successful wells 450BOPD = 13,500 barrels over 1 month testing.
- Anticipated net cash profit to Carnarvon on 1 month test programme \$200,000 (after Thai royalty and before tax).
- Successful wells will remain on sustained production after testing.
- Expected payback period of:
   First 2 wells ~ 1 month drilling free carried by operator.
   Others ~ 4 months.
- Calculations based on 4 th Qtr 2005 production results As programme develops, economies of scale should improve these numbers.



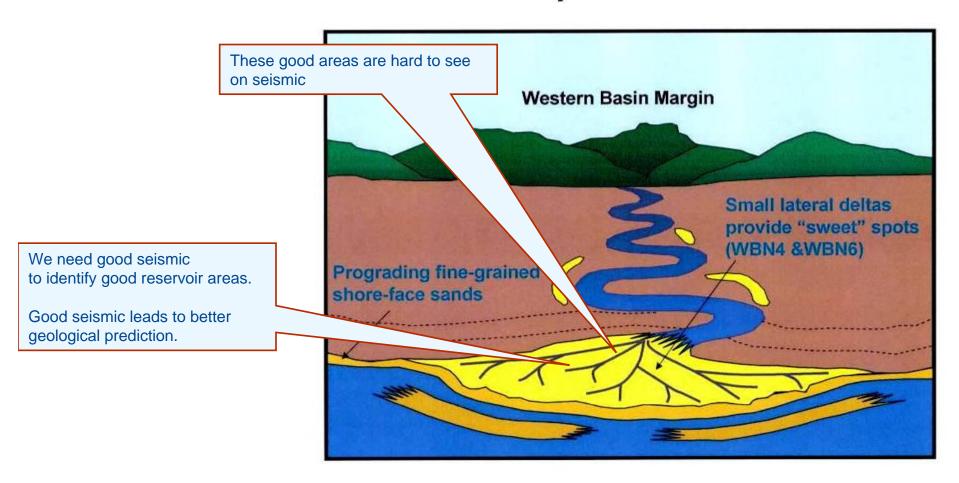
# PHASE 2 PROGRAMME - UP TO 20 WELLS

- A big programme dependent on success of Phase 1.
- At least 1 well in L33/43 to north of Wichian Buri.
- Other wells in L44/43 mixture of development, appraisal and exploration.
- Must await the processing of the 3D seismic.
- Startup late in 2006/early 2007 dependent on Govt approvals and weather.
- Up to 20 well locations to be determined:
  - Actual number dependent on results and oil production of Phase 1.
- Anticipated cost of a 20 well programme:
  - \$4.3M net Carnaryon.
  - plus completion \$46,000 net to Carnarvon per successful well.



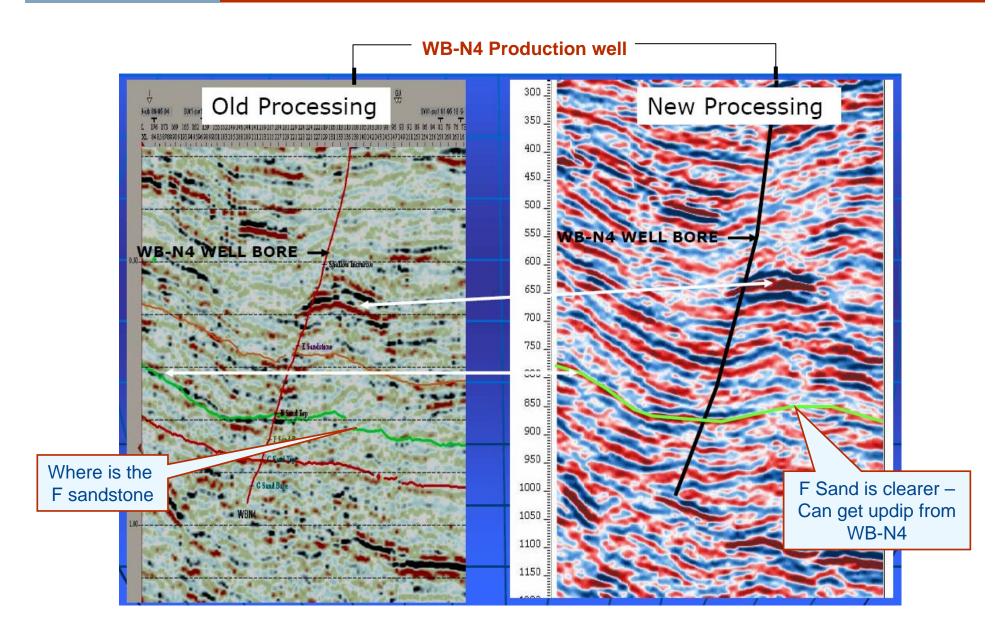
# NEED FOR GOOD SEISMIC

# F-Sand Depositional Model





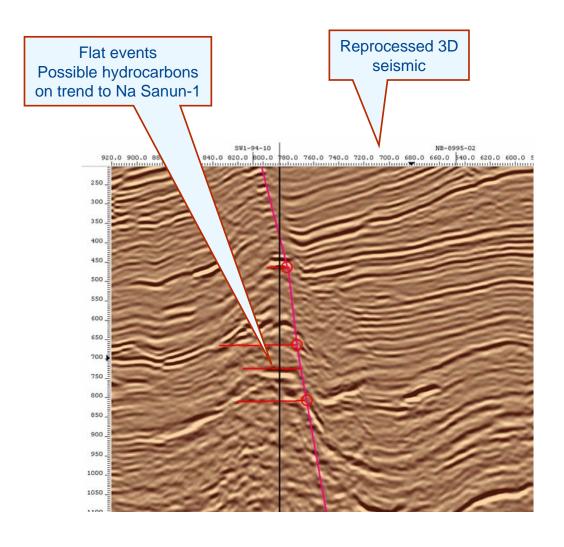
# REPROCESSING OF 3D SUCCESSFUL





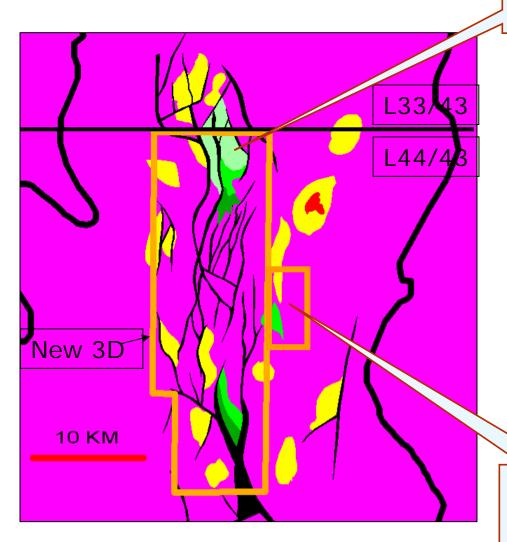
# REPROCESSING 3D SUCCESSFUL HYDROCARBON INDICATORS

- Na Sanun-1 briefly flowed 1,375 BOPD from fractured volcanics.
- Seismic reprocessing has defined several possible hydrocarbon indicators on trend and updip of Na Sanun-1.
- New 3D seismic has covered this area.
- Other similar seismic features are present elsewhere on the reprocessed seismic.





## 3D SEISMIC ACQUISITION



Wichian Buri Oil Field

- Seismic acquisition complete.
- Currently being processed and targets are being identified for Phase 2 programme of up to 20 wells.
- Coverage 225 sq kms.
- More 3D seismic will be required.

EARLY RESULTS OF
PROCESSING INDICATE
GOOD QUALITY SEISMIC

3D extended over Na Sanun trend



## UPSIDE – WICHIAN BURI AREA

#### Wichian Buri Oil Field

- Wells could flow like WB-1 commenced production ~ 300 bopd.
- Improve recovery.
- Minimise capex and opex.
- Workover existing wells.
- Prove up more reserves.

### Other

- Many other fault compartments like Wichian Buri.
- "G" sandstone unknown potential.
- Fractured volcanics:
  - Na Sanun flowed oil at ~ 1,375 bopd, 4 times better than WB-1.
  - Can get up-dip on reprocessed seismic.
- Other shallower sandstones?
- Northern Block L33/43 unknown potential seismic reprocessing shows possible hydrocarbon indicators.



## **SUMMARY**

### **Delivered on programme**

- Phase 1 drilling of up to 6 wells underway.
- Seismic reprocessing completed & successful.
- 3D seismic completed & being processed.

### Phase 2 drilling being planned

Workover of existing producers in planning

Plenty of upside potential

### This new Joint Venture is different

- Working together.
- Managers with appropriate experience.



## CONCLUSION – TIGER BY THE TAIL

### The next 12 months will be a year of consolidation and growth for Carnarvon. Key success drivers will be:

### **Exciting work program**

- Planned completion of up to 26 wells.
- Complete processing of the recently acquired 225km<sup>2</sup> of 3D seismic to identify stage 2 exploration drill targets.
- Multi-well rig contractor agreement for the next 12 months.

#### New JV is different

 Strong management, exploration and development teams working together to ensure the success of Wichian Buri.

### **Exciting upside potential from field**

- Currently producing around 75 BOPD.
- Workover program of current producing wells to improve their production profiles and significant upside from current development drilling.
- Production from other sands.
- Success in other fault blocks.

### **Strong operating environment**

- Oil prices currently around US\$70 barrel. We are in a bull market for energy.
- World is now using 27 billion barrels of oil, 9 times more than we are finding (3 billion) on an annual basis.

### **Corporate Growth**

- Asset opportunities and partnerships being evaluated these take time to fully consider.
- Carnarvon has a very large technical database spanning 21 years.



## CONTACTS

### **Ted Jacobson**



PETROLEUM L I M I T E D ABN 60 002 688 851

#### **Managing Director**

Phone (08) 9321 2665 Fax (08) 9268 2830

Email tjacobson@carnarvonpetroleum.com

### **Richard Simpson**



#### **Head of Corporate Finance**

Phone (08) 9268 2824 Fax (08) 9268 2830

Email richard\_simpson@hartleys.com.au

### **Peter Leonhardt**



PETROLEUM LIMITED

#### Chairman

Phone (08) 9321 2665 Fax (08) 9321 8867

Email pleonhardt@carnarvonpetroleum.com

### **Dale Bryan**



#### Corporate Finance Manager

Phone (08) 9268 2829 Fax (08) 9268 2830

Email dale\_bryan@hartleys.com.au



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