## 3D OIL LIMITED

Capital raising presentation





SEPTEMBER 2018 ASX: TDO

### **CORPORATE SNAPSHOT**

## 3D Oil has built a portfolio high potential, frontier offshore exploration permits in Australia including offshore Western Australia (Bedout Sub-basin) and offshore Tasmania (Otway Basin)

### **Corporate overview**

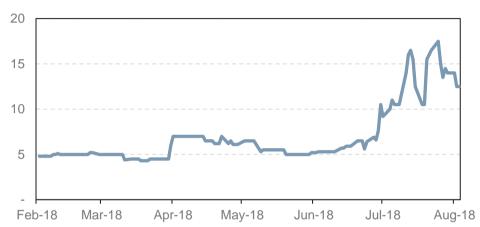
- Portfolio of high potential exploration permits including the offshore permits in the Bedout Sub-basin and Otway Basins
- 100% ownership of WA-527-P, located adjacent to the significant Carnarvon/Quadrant oil discoveries (Dorado-1)
- T/49P contains one of the largest conventional prospective gas resources on the east coast (10TCF Best Estimate¹)
- 3D Oil is financially prudent and maintains a highly efficient capital structure

#### **Financial information**

Enterprise value	A\$30.1m
Debt (30-Jun-2018)	Nil
Cash (30-Jun-2018)	A\$1.0m
Market capitalisation	A\$31.1m
Number of shares	239.1m
Share price (31-Aug-2018)	A\$0.130

### **Share price performance (last 6 months)**

#### **Share price (Acps)**



### **Top shareholders**

Top 20 holders	~64%
Oceania Hibiscus (joint venture partner)	12.9%
Noel Newell (Executive Chairman)	18.3%

Source: IRESS

Notes

Refer to ASX announcement dated 27 July 2017 for details on T/49P Prospective Resource estimate

### CAPITAL RAISING OVERVIEW



### 3D Oil is raising A\$2.5m via a placement and A\$0.5m via a share purchase plan

#### Offer structure

- A\$2.5m placement to sophisticated and institutional investors ("Placement")
  - New shares to be issued at an offer price of A\$0.115 per share, representing a
    - 11.5% discount to the last closing price A\$0.130
    - 10.2% discount to the 5 day VWAP of A\$0.128
    - 15.7% discount to the 10 day VWAP of A\$0.136
  - New shares to be fully paid and rank equally with existing 3D Oil shares
  - Directors and management expect to participate in the Placement with A\$0.1m to be completed in Tranche 2 with shareholder approval
  - Placement will utilise 3D Oil's existing placement capacity pursuant to ASX Listing Rule 7.1
- A fully underwritten share purchase plan ("SPP") will be offered to existing shareholders, targeting to raise A\$0.5m at the same price

### **Use of funds**

1	WA-527-P seismic purchase and comprehensive prospectivity update	A\$1.5m
2	WA-527-P seismic planning	A\$0.8m
	Ongoing working capital	A\$0.5m
	Costs of the Placement & SPP	A\$0.2m
	Total use of funds	A\$3.0m

- 1 A\$1.5m to be applied to purchasing seismic data and a comprehensive prospectivity update across WA-527-P
  - New seismic data aiming to potentially identify
     Dorado-1 style leads across 3D Oil's 100% owned
     WA-527-P
- 2 A\$0.8m applied towards planning for 3D seismic and continued permit progress
  - Seismic planning to be undertaken in 2H CY18

## CAPITAL RAISING TIMETABLE



### An indicative timetable for the capital raising is provided below

3D Oil trading halt ("Trading Halt")	Monday, 3 September 2018
Record date for SPP	Tuesday, 4 September 2018
Transaction announced and 3D Oil resumes trading	Wednesday, 5 September 2018
Settlement of Tranche 1 placement	Monday, 10 September 2018
Dispatch SPP booklet to shareholders	Wednesday, 12 September 2018
Closing date for SPP	Wednesday, 26 September 2018
Notification of shortfall to the ASX	Friday, 28 September 2018
Allotment date for SPP shares	Wednesday, 3 October 2018
Commencement of trading of SPP shares on ASX	Thursday, 4 October 2018
AGM authorising Tranche 2 placement	Thursday, 1 November 2018
Settlement of Tranche 2 New Shares (subject to AGM approval)	Tuesday, 6 November 2018
Allotment of Tranche 2 New Shares (subject to AGM approval)	Wednesday, 7 November 2018

<sup>\*</sup>The timetable above is indicative only and may be varied subject to the ASX Listing Rules

### **BOARD OF DIRECTORS**



## Board and its advisors have significant oil and gas experience (former Director of BHP, Woodside) having led some of Australia's largest corporates

### Proven success of 3D Oil Board and management team

Noel Newell, current Executive Chairman, is the Founder of 3D Oil and has a track record of exploration success at 3D
 Oil (West Seahorse) and BHP Petroleum

#### Noel Newell - Executive Chairman

- Founder and Managing Director of 3D Oil Limited since 2003
- Over 25 years oil and gas experience including Principal Geoscientist at BHP Petroleum

#### Ian Tchacos - Non-Executive Director

- Over 30 years international oil and gas experience
- Former Managing Director of Nexus Energy (ASX: NXS) from 2004 to 2009
  - Took Nexus from A\$2m micro-explorer to an ASX200 offshore producer (market cap >A\$900m)
- Current Executive Chairman of ADX Energy (ASX: ADX) and Non-Executive Director of Xstate Resources (ASX: XST)

#### Leo De Maria - Non-Executive Director

- Extensive accounting and corporate finance experience
- Chartered Accountant qualified

#### Melanie Leydin - Company Secretary

- Principal of the Chartered Accounting firm Leydin Freyer
- Over 25 years experience in the accounting profession and has extensive experience in relation to public company responsibilities

#### Peter Willcox - Board advisor

- Former Board member of Australia's largest businesses including BHP Billiton, Woodside Petroleum, Telstra, CSIRO, CVC Asia-Pacific, North Limited, James Hardie and Lend Lease
- Former Chairman of AMP Limited, MAYNE and CSIRO
- Significant oil and gas experience as former CEO of BHP Petroleum

### PORTFOLIO OVERVIEW



## 3D Oil has opportunistically built a portfolio of significant positions in some of Australia's most prospective offshore exploration basins

## 1 WA-527-P (100% owned) Exploration – Bedout Sub-basin

- ✓ 2017: Opportunistic acquisition in frontier acreage next to Phoenix South field – one of the largest offshore oil and gas-condensate discoveries in recent times
- √ 2018: The Dorado-1 hydrocarbon discovery uncovered by Quadrant Energy and Carnarvon Petroleum is located west of WA-527-P.
- Refer to slides 7-14 for further information

## **T49/P (100% owned)** *Exploration – Otway Basin*

2

- ✓ 2012: 3D Oil recognized the potential for an east coast gas crisis
- ✓ 2013: Acquired exploration permit T/49P, one of the largest and underexplored blocks in the Otway Basin
- ✓ 2014: Acquired 3D seismic and identified leads and prospects proximal to existing infrastructure at Thylacine
- √ 2017: Announced prospective resource of 10TCF (Best Estimate)
- Refer to slides 16-20 for further information

VIC/P57 (24.9% owned) Exploration – Gippsland Basin 3

Founding asset of 3D Oil in mid 2000s Joint venture with Hibiscus Petroleum

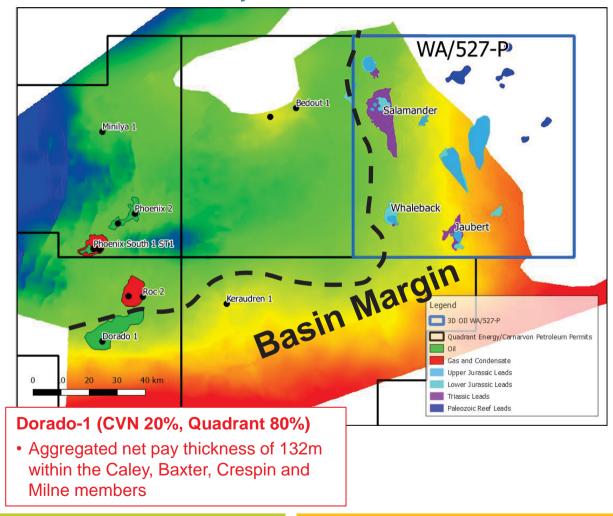
Refer to slide 15 for case study on 3D Oil value generation



# The WA-527-P permit covers a large underexplored area that is situated next to the significant Dorado-1 hydrocarbon discovery in the Bedout Sub-basin

- Located in the offshore Bedout Sub-basin of Western Australia, and covers 6,580km²
- 3D Oil granted 100%-interest of the exploration permit in March 2017
- Bedout Sub-basin was seen to have prolific potential but remains underexplored
  - BHP targeted the Bedout Sub-basin in their earliest offshore wells in the 1970s
- WA-527-P is located north east of the Dorado-1 hydrocarbon discovery uncovered by a Joint Venture of Quadrant Energy, Carnarvon Petroleum in July 2018
  - Discoveries considered to be in an analogous geological setting to 3D Oil's 100%-owned WA-527-P
- Work program will aim to comprehensively assess the value of WA-527-P over the next 3 years
- 3D Oil has identified 3 major leads including Salamander, Whaleback and Jaubert after completing a detailed technical assessment in March 2018

### **Permit locations and early Triassic TWT Structure**



## SIGNIFICANCE OF DORADO-1 (CVN 20% / Quadrant 80%)

# Quadrant group executive, Fred Wehr, has called the Dorado-1 oil discovery a game changer for Quadrant and Carnarvon, and the best discovery he has seen in 35 years

- In July 2018, Quadrant and Carnarvon (ASX: CVN) made a significant oil and gas discovery in their Dorado-1 well
  - CVN has traded up +267% since then (adding ~A\$300m to their market capitalisation for their 20% ownership)
  - 3D Oil has increased in share price ~100% since the discovery
- Subsequent reports have highlighted how significant the Dorado-1 discovery is for the Australian oil and gas industry, some have made claim this is Australia's most exciting discovery in decades
- New reports have emerged highlighting the fact that 3D Oil hold the permit north east and it is 100%-owned

### Just what the industry needed

"A big oil discovery at Dorado-1 is just reward for Quadrant"

"In fact, given the industry's extended exploration malaise, it's not difficult to make a case for it being one of our most significant and needed finds ever."

"Dorado-1 is guaranteed to stimulate new exploration and appraisal. Ever-alert Carnarvon snapped up WA-521-P north of WA-435-P, and more recently 3D Oil was awarded WA-527-P to the east (how much easier should it be now to attract farm-in interest to these permits post-Dorado)?"

- Oil and Gas Radar, 20 July 2018

## **Quadrant, Carnarvon tap Bedout Basin** 'game changer'

"Carnarvon Petroleum and Quadrant Energy have made a "staggering" oil discovery at their Dorado-1 well being drilled in the Bedout Basin, according to operator Quadrant."

"I'll tell you that the low case is solidly commercial, the midcase is awesome and the upside is staggering," Mr Wehr said when asked about the size of the prospect. "I hope I'm not overstating this or overselling it, but this is something I've never seen in a 35-year career."

- The West Australian, 18 July 2018

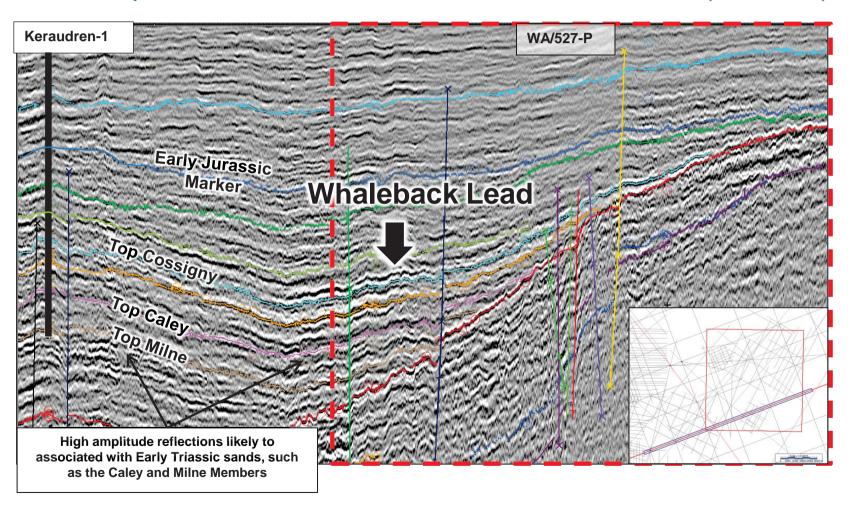
## WA-527-P: GEOLOGICAL PROFILE



## In addition to the prospective Lower Triassic play, 3D Oil has identified multiple leads within other play levels

Seismic interpretation across WA/527-P

(line JN87-20)



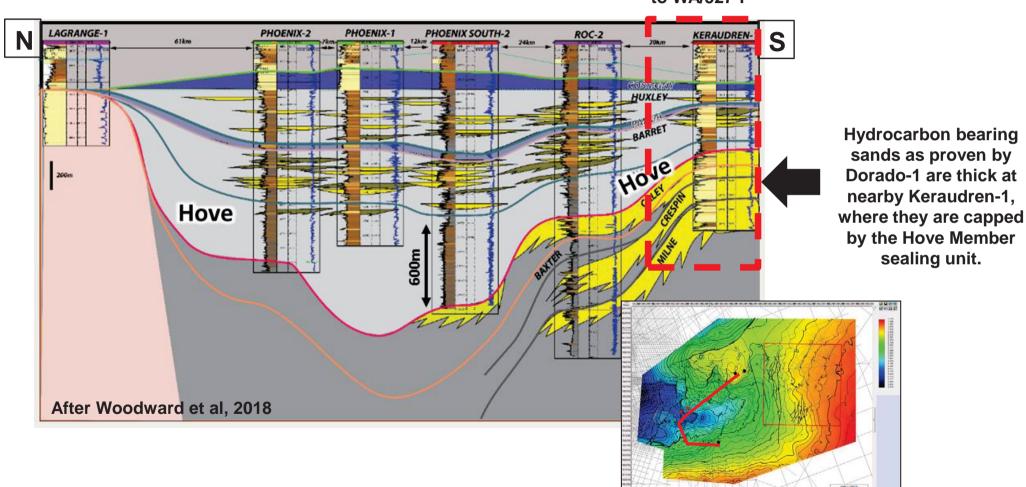
## BEDOUT BASIN GEOLOGICAL INTERPRETATION



Results from the Dorado-1 have proven the presence of hydrocarbon bearing sands in not only the Caley member but also the deeper Baxter, Crespin and Milne sands



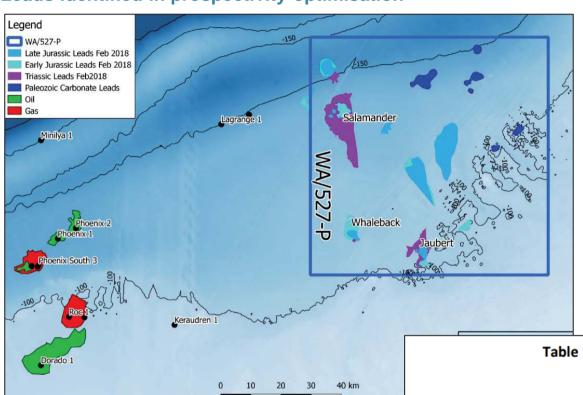
Section analogous to WA/527-P



## WA-527-P: PROSPECTIVITY OPTIMISATION

## Prospectivity of WA-527-P has been significantly upgraded as neighbouring Dorado-1 demonstrates a high quality reservoir, competent seal and a prolific, working petroleum system

### Leads identified in prospectivity optimisation



- In February 2018, 3D Oil completed a thorough prospectivity review
- Multiple leads have been generated;
  - All are considered prospective for oil
- The generation of oil-rich leads and detailed analysis provides the platform for 3D Oil to launch a targeted farm-out campaign
- 3D Oil has identified over 15 leads across the permit
  - Generated using a combination of open-file 2D seismic data and the Searcher Seismic Multiclient Bilby 2D seismic survey
- Subsequent Dorado-1 discovery greatly upgraded the prospectivity of the leads

Table 1: WA/527-P Prospective Resource Estimate (MMbbls)
Recoverable Oil

Prospect	Status	Low	Best	High
Salamander	Lead	57	191	713
Jaubert	Lead	17	72	205
Whaleback	Lead	16	87	219
WA/527-P Arithmetic Total		90	349	1,138



## 3D Oil is pursuing an accelerated exploration program at WA-527-P following the exploration success at Dorado-1 and the industry interest this permit is receiving

- Awarded in March 2017 for a nominal three year exploration program including:
  - Year 1-2: Geological and geophysical studies and seismic planning

Expected acceleration due to prospectivity increase

- Year 3: Acquire process and interpret 510km<sup>2</sup> 3D seismic data and assess results
- 3D Oil is now seeking a farminee to finance the initial stage of exploration which will include 3D seismic acquisition

### Illustrative work program for WA-527-P

	2017		2018			2019				2020						
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Permit acquired	•	March	2017													
Prospectivity review		Com	pleted (	on budg	jet)											
Farm-in process						C	ngoing									
Acquire multi-client seismic							•	Poter	itial mul	ti-client	seismic	acquisit	ion (cost	t A\$150I	<b>(</b> )	
Seismic processing																
3D seismic planning																
3D seismic acquisition											~A\$4r	m				
Drill planning																
Drill target														~A\$3	30m	

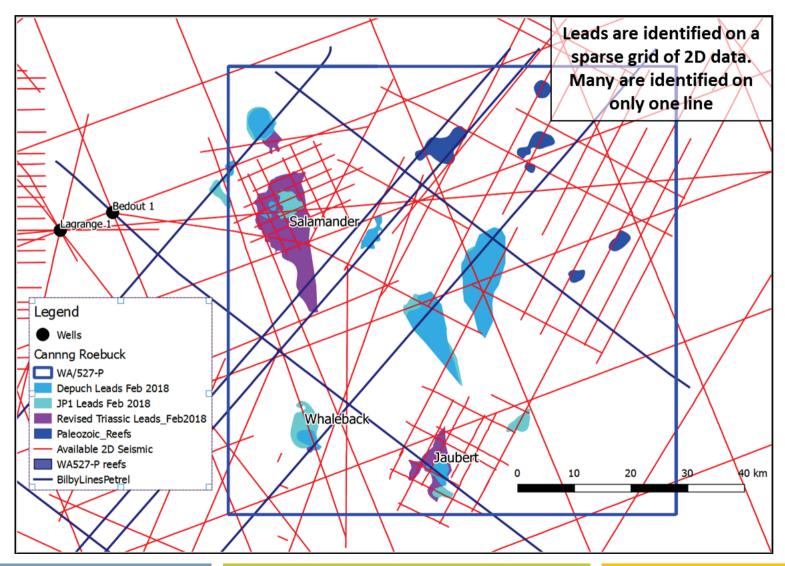
## WA-527-P: UPCOMING CATALYSTS



## There are a number of key catalysts that could increase the prospectivity of 3D Oil's 100%-owned WA-527-P in the short and medium term

3Q 2018: Review Phoenix South-3 and final Dorado-1 results (CVN/Quadrant permits)
2H 2018: Secure farm-in partner
2H 2018: Licencing of additional multi-client seismic data within WA-527-P
4Q 2018: Potentially mature leads to prospect status through seismic interpretation
2019: Results from potential follow-up wells for Dorado-1 (CVN/Quadrant permits)
1H 2019: Obtain regulatory approval to acquire new 3D seismic data
2H 2019: Shoot 3D seismic and process to generate drill-ready targets
2020: Drilling exploration well

## 3D Oil is planning 3D seismic acquisition to mature the leads it has identified with the current 2D data set



### 3D OIL VALUE CREATION



## The West Seahorse transaction demonstrates 3D Oil's ability to recognise opportunities and crystallise value

Acquisition April 2004

Further exploration 2007-2011

Establish joint venture August 2012 Monetise value August 2014









In 2004, 3D Oil was granted the VIC/P57 Exploration Permit, including **West Seahorse** 

3D Oil listed on the ASX in 2007 and raised funds to progress VIC/P57

Exploration included resource upgrades and booking reserves of 4.6MMstb (2P) in 2008

### A\$27m placement and farm-in

3D Oil de-risked the development with execution of a farm-in agreement with Hibiscus Petroleum

Transaction included a A\$27m placement to Hibiscus Petroleum to fund operations

#### **US\$14m** sale of interest

3D Oil monetised its remaining interest in West Seahorse to Carnarvon Hibiscus for US\$14m and retains an equity interest of 24.9% in the VIC/P57 exploration permit

### **Current management have previously:**

- ☑ Booked maiden resource and reserves
- ☑ Secured a farm-in with an industry partner
- ...all within their experiences at 3D Oil

Current near term objectives for WA-527-P and T/49P

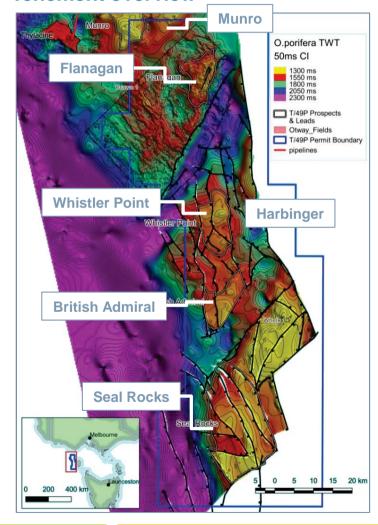


### Vast frontier acreage with recently announced 10TCF Prospective Resource (Best Estimate)<sup>1</sup> in shallow water in the Otway Basin

#### **Asset overview**

- T/49P was acquired by 3D Oil in 2013 through its bid in the 2012 Australian Offshore Gazettal round
  - Large frontier permit (4,960 km<sup>2</sup>) and relatively shallow water (primarily ~100m)
  - Opportunistic acquisition by 3D Oil at the time
  - Permit contains 1 prospect and 5 leads
- 3D Oil has 100%-ownership of exploration permit
  - Currently in active discussions with potential major farmin partners to support and de-risk exploration
- Prospects are interpreted to contain all the geological elements required for economic accumulations of hydrocarbons
- Located adjacent to significant infrastructure and major production wells including Thylacine-1 and Geographe-1 (Beach Energy)
  - Beach Energy announced a regional program to extend the field lives with potential for up to five wells
- Otway Basin has been a prolific gas-producing province since the late 1980s
  - The latest fields developed in the early 2000s include Thylacine, Casino, Minerva and Henry

#### **Tenement overview**

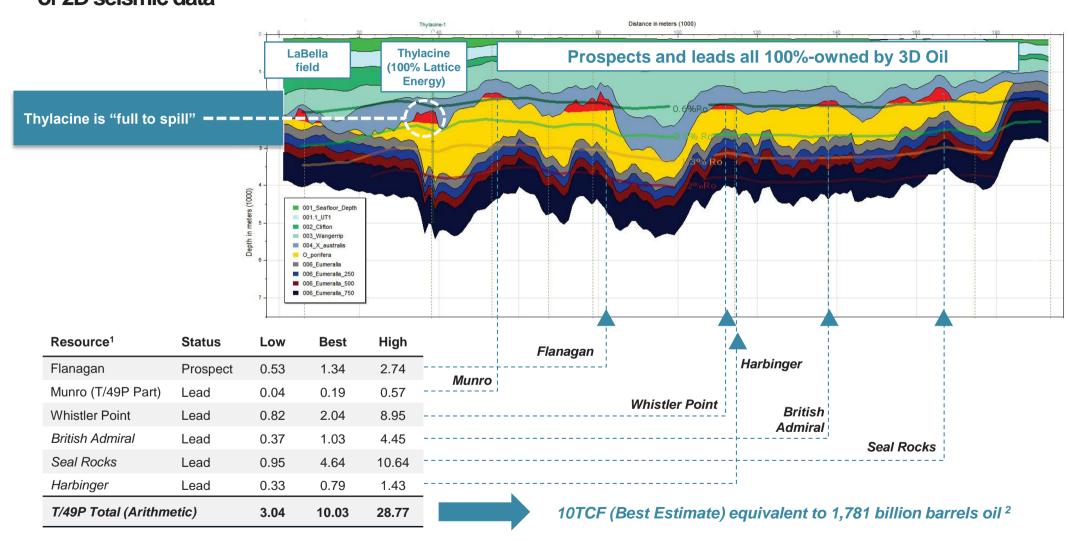


Refer to ASX announcement dated 27 July 2017 for details on T/49P Prospective Resource estimate

## 2 T/49P – PROSPECTIVE RESOURCE ESTIMATES



### In addition to the Flanagan Prospect at least 5 leads have been identified from a broad grid of 2D seismic data



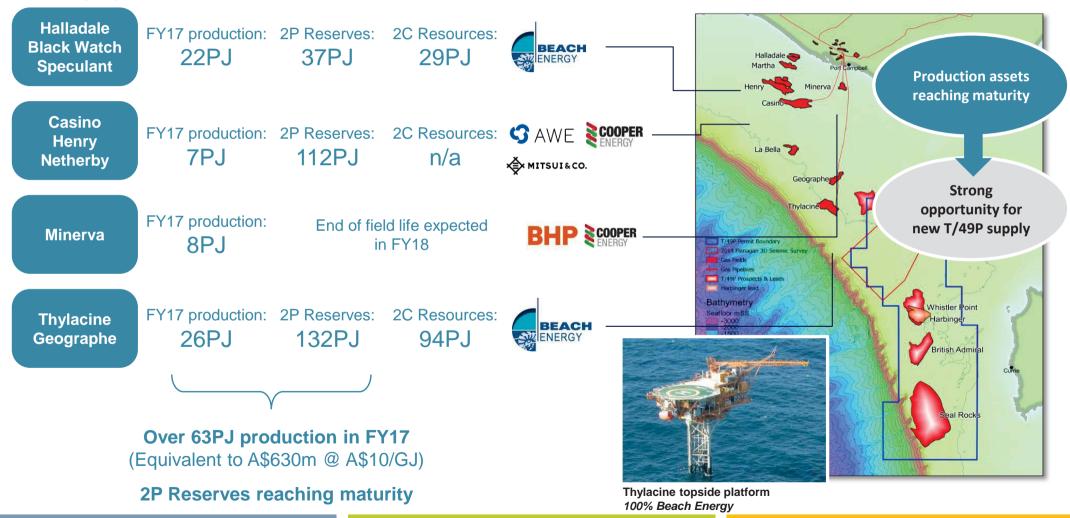
Refer to ASX announcement dated 27 July 2017 for details on T/49P Prospective Resource estimate

Converted from boe to cubic feet using SPE conversion factor of 5.66



### T/49P is located next to existing domestic gas infrastructure owned by Lattice Energy, BHP, AWE, Mitsui and Cooper Energy

### **Nearby operations**



### T/49P – POTENTIAL FLANAGAN DEVELOPMENT

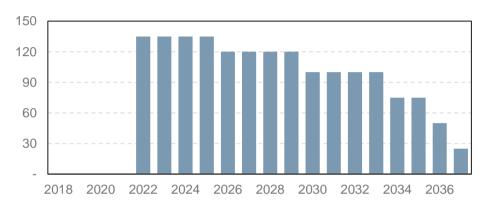


## A potential development at Flanagan could be highly economic based on Worley Parsons analysis, even with conservative development and pricing scenarios

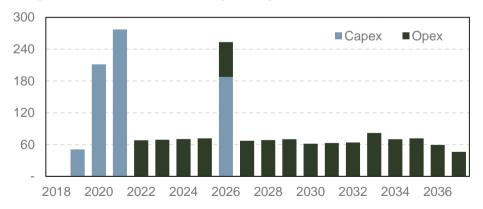
### Flanagan NPV assessment

- 3D Oil commissioned an economic study by Worley Parsons in 2017 to assess a development at Flanagan
  - Best Estimate Prospective Resources at Flanagan are 1.34TCF (or 237mmboe<sup>1</sup>)
  - Flanagan is a small proportion of total T/49P prospective resources of 10TCF (Best Estimate)
- Economic assessment highlighted significant upside:
  - NPV = A\$541m (at 10% discount rate, pre-tax)
  - IRR = 33.4% (pre-tax)
  - From only 600BCF recovered and at a conservative sale price of A\$6/MCF
- A tie-in development was considered where a subsea well at Flanagan is tied in to Lattice Energy's Thylacine-Geographe infrastructure
  - Total pre-production capex estimate of A\$539m
  - Conservative economic analysis based on stand alone development and excluding condensate

### **Production forecast (mmcfd)**



### **Expenditure forecast (A\$m)**



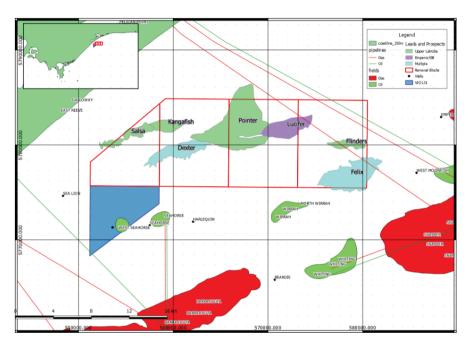


## VIC/P57 has 6 prospects and leads located along Australia's most prolific oil and gas producing basin that are defined by state of the art reprocessed 3D seismic data

- Located in the Gippsland Basin, which had initial reserves estimated at 4 billion barrels of oil and 11.5 trillion cubic feet of gas
- 3D Oil has a 24.9% interest in VIC/P57 with Joint Venture partner Hibiscus Petroleum
  - 3D Oil to remain technical advisor to the operator of the permit
  - JV has been awarded the permit for a further 5 year tenure which includes a work programme carefully designed to mature Prospects to drill ready, and potentially identify additional gas targets.
- 6 prospects and leads identified across the permit
- All prospects and leads defined by state of the art reprocessed 3D seismic data

#### Oil - Prospective resource (MMbbls)<sup>2</sup>

Location	Status	Low	Best	High
Felix	Prospect	6.84	15.94	26.94
Salsa	Lead	10.65	15.09	20.57
VIC/P57 Total <sup>1</sup>		17.51	31.03	47.54



Gas - Prospective resource (BCF)<sup>2</sup>

Location	Status	Low	Best	High
Pointer	Prospect	140.10	235.26	364.91
Dexter	Lead	36.96	131.98	259.14
VIC/P57 Total <sup>1</sup>		177.06	367.24	624.05

Note:

Arithmetic total

Refer to ASX announcement dated 27 July 2017 for details on VIC/P57 Prospective Resource estimate

### Important Disclaimer



### **Important Notice**

This presentation contains certain statements which may constitute "forward-statements". Such statements are only predictions and are subject to inherent risks and uncertainties which could cause actual values, results, performance or achievements to differ materially from those expressed, implied or project in any forward-looking statements.

The nature of the business and activities carried on by 3D Oil are speculative and no representation or warranty, express or implied, is made by 3D Oil that the material contained in this presentation will be achieved or prove to be correct. Except for statutory liability which cannot be excluded, each of 3D Oil, its officers, employees and advisers expressly disclaim any responsibility for the accuracy or completeness of the material contained in this presentation and excludes all liability whatsoever (including in negligence) for any loss or damage which may be suffered by any person as a consequence of any information in this presentation or any error or omission there from. 3D Oil accepts no responsibility to update any person regarding any inaccuracy, omission or change in information in this presentation nor any other information made available to a person nor any obligation to furnish the person with any further information.

The information in this presentation is in summary form only and does not contain all the information necessary to fully evaluate any transaction or investment. It should be read in conjunction with 3D Oil's other periodic and continuous disclosure announcements lodged with the ASX. This document does not constitute an offer, invitation or recommendation to subscribe for or purchase any securities and does not form the basis of any contract or commitment. All persons should consider seeking appropriate professional advice in reviewing this presentation and 3D Oil.

### Important Notes



#### **Qualified Petroleum Reserves and Resources Evaluator Statement**

The Prospective Resources estimates in this release are based on, and fairly represent, information and supporting documents prepared by, or under the supervision of Dr David Briguglio, who is employed full-time by 3D Oil Limited as Exploration Manager. He holds a BSc. Hons and PhD in Petroleum Geoscience and has been practicing as a Petroleum Geoscientist for 8 years. Dr Briguglio is qualified in accordance with ASX listing rule 5.41 and has consented in writing to the inclusion of the information in the form and context in which it appears.

#### **Prospective Resources**

The estimates have been prepared by the company in accordance with the definitions and guidelines set forth in the Petroleum Resources Management System, 2011 approved by the Society of Petroleum Engineer. Prospective Resource estimates are for recoverable volumes and unless otherwise stated this report quotes Best Estimates and gross volumes. The estimates are unrisked and have not been adjusted for both an associated chance of discovery and a chance of development. The Prospective Resources have been estimated probalistically.

## Key Risks



Primary risks are related to exploration, which relies on the interpretation of complex and uncertain data and information which cannot be relied upon to led to a successful outcome in any particular case. Petroleum drilling activities are also inherently risky. Drilling may be curtailed, delayed or cancelled. Petroleum exploration is inherently uncertain and may involve significant risk of failure.

The estimates of 3D Oil's oil and gas prospective resources are based on standard industry practice, experience and judgements that carry inherent uncertainty. There is a material chance that future exploration programs will alter the current prospective resource estimations. Other risks may affect the resource estimate, for example, commodity price movements.

With respect to prospective resource estimates, these estimates relate to undiscovered accumulations which have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation will be required to determine the existence of a significant quantity of potentially moveable hydrocarbons. Political and sovereign risks in Australia include regulatory, environmental and native title.