



# **Noosa Mining Conference Presentation**

21 July 2016

# **Disclaimer & Important Notice**



- This presentation does not constitute investment advice. Neither this presentation not the information contained in it constitutes an offer, invitation, solicitation or recommendation in relation to the purchase or sale of shares in Elk Petroleum Ltd ACN 112 566 499 (the "Company" or "Elk") in any jurisdiction.
- Shareholders should not rely on this presentation. This presentation does not take into account any person's particular investment objectives, financial resources or other relevant circumstances and the opinions and recommendations in this presentation are not intended to represent recommendations of particular investments to particular persons. All securities transactions involve risks, which include (among others) the risk of adverse or unanticipated market, financial or political developments.
- The information set out in this presentation does not purport to be all inclusive or to contain all the information which its recipients may require in order to make an informed assessment of the Company. You should conduct your own investigations and perform your own analysis in order to satisfy yourself as to the accuracy and completeness of the information, statements and opinions contained in this presentation.
- To the fullest extent permitted by law, the Company does not make any representation or warranty, express or implied, as to the accuracy or completeness of any information, statements, opinions, estimates, forecasts or other representations contained in this presentation. No responsibility for any errors or omissions from this presentation arising out of the negligence or otherwise is accepted.
- This presentation may include forward looking statements. Forward looking statements are only predictions and are subject to risks, uncertainties and assumptions which are outside the control of the Company. These risks, uncertainties and assumptions include commodity prices, currency fluctuations, economic and financial market conditions in various countries and regions, environmental risks and legislative, fiscal or regulatory developments, political risks, project delay or advancement, approvals and cost estimates.
- Actual values, results or events may be materially different to those expressed or implied in this presentation. Any forward looking statements in this presentation speak only at the date of issue of this presentation. Subject to any continuing obligations under applicable law and the ASX Listing Rules, the Company does not undertake any obligation to update or revise any information or any of the forward looking statements in this presentation or an changes in events, conditions or circumstances on which any such forward looking statement is based.
- The reserves and resources assessment contained in this presentation follows the guidelines set forth by the Society of Petroleum Engineers Petroleum Resource Management System (SPE-PRMS).
- The Reserves and Contingent Resources in this announcement and in the Offer Booklet of which this presentation forms part, relating to the Grieve CO<sub>2</sub> EOR project, operated by Denbury Resources Inc, is based on an independent review and audit conducted by VSO Petroleum Consultants Inc, previously known as Pressler Petroleum Consultants, Inc. and fairly represents the information and supporting documentation prepared by, or under the supervision of the VSO Petroleum Consultants Inc. The review and audit was carried out in accordance with the SPE Reserves Auditing Standards and the SPE-PRMS guidelines under the supervision of Mr. Grant Olsen, a Director of VSO Petroleum Consultants, Inc. (he is not an Elk employee) an independent petroleum advisory firm. Mr. Olsen is a Registered Professional Engineer in the State of Texas and his qualifications include a Bachelor of Science and Master of Science (both in Petroleum Engineering) from Texas A&M University. He has more than 10 years of relevant experience. Mr. Olsen is a member of the Society of Petroleum Engineers (SPE) and an Associate Member of the Society of Petroleum Evaluation Engineers. Mr. Olsen meets the requirements of Qualified Petroleum Reserves and Resource Evaluators as defined in Chapter 19 of the ASX Listing Rules and consents to the inclusion of this information in this report.
- The information in this presentation, and in the Offer Booklet of which this presentation forms part, that relates to Reserve and Contingent Resources estimates for the Grieve CO<sub>2</sub> EOR project and the Contingent Resource estimates for the Singleton CO<sub>2</sub> EOR project have been compiled or in the case of the Singleton CO<sub>2</sub> EOR project prepared by Mr. Brian Dolan, COO and VP-Engineering of Elk Petroleum USA who is a qualified person as defined under the ASX Listing Rule 19 and has consented to the use of the reserves and resources figures in the form and context in which they appear in this presentation. Mr. Dolan is a full-time employee of the company. Mr. Dolan earned a degree in Mechanical Engineering from the University of Colorado at Boulder and has more than 23 years of relevant experience. Mr. Dolan has sufficient experience that is relevant to the company's Reserves and Resources to qualify as a Reserves and Resources Evaluator as defined in the ASX Listing Rules. Mr. Dolan consents to the inclusion in this presentation of the matters based on the information in the form and context in which it appears.

#### Conventional oil, production focused, proven practices and repeatable growth



- Elk Petroleum Limited (ASX:ELK): positioned for opportunity in current oil price environment
- Focused on low risk enhanced oil recovery ("EOR") redeveloping proven, conventional oil fields
- EOR born from low oil prices to maintain reserves & production from existing assets
- Cornerstone Grieve Oil Project nearing well advanced with production expected CYE 2017
- Grieve Project expected to deliver to Elk production of 2.4 to 3.1 mmbbls over first 5-years\*
- Average annual net income+ of A\$25-31 million p.a. over first 5-years\*
- Multiple organic and bolt-on acquisition opportunities in company's pipeline
- Business leveraged to capture opportunities created by low oil prices

# **Engineering - not exploration**

<sup>\* 2</sup>P and 3P forecast production first 5Y from first oil

<sup>^ 0.72</sup> AUD:USD.

<sup>+</sup> Futures curve & Bloomberg Consensus oil price forecasts

<sup>\*</sup>Subject to successful restructure of Grieve JV with Denbury and subject to other risk factors including as detailed in Section 4 of the Offer Booklet.

# **Elk performance snapshot**





Elk share price chart 12-months ending 2 June 2016

1-Year return over 182%

Capital Structure		
ASX code	ELK	
Ordinary Shares	672.3m	
52-week Low-High (A\$/share)	0.02-0.13	
Market cap @ 10 cps	A\$48.7m	
1-Year Return	+182.47%	
Cash (15 July 2016)	~A\$15.8m	
2P Reserves	~5.3 mmbls	
2C Resources	~3.9 mmbls	

Reserves and Resources as set out in the Company's Quarterly Activities Report ASX Announcement of 29 January 2016. No changes to Elk's Reserves and Resources have occurred since this announcement.

Major shareholders		
Republic Investment Management	23.0%	
Cypresswood Capital	8.48%	
Robert Healy	8.01%	
Begley Superannuation	8.37%	
Leanne Marshall	2.57%	
Bradley Lingo	1.56%	

## **Experienced Management Team**



#### **Brad Lingo. MD & CEO**

- Appointed 1 August 2015
- Former MD & CEO of Drillsearch Energy
  - 15 x increase in market valuation / 8 x increase in share price
  - Became Australia's 3rd largest onshore oil producer
  - Finance successfully raised ~A\$450m in equity and debt
  - Delivered 29 new conventional discoveries
  - Drilled 98 wells over 6 -years with 73% success rate
  - Oversaw the production commencement of 12 new fields

#### Expertise:

- Upstream/midstream oil & gas company building track record
- Business development, new ventures, M&A, corporate finance

#### Experience:

- Tenneco Energy
- El Paso Corporation
- Sunshine Gas
- Commonwealth Bank of Australia (SVP & Head of Oil & Gas)

#### **David Evans. COO**

- Appointed 1 May 2016
- Former CTO and acting COO Drillsearch
- Geologist—29 years upstream global oil & gas development, production and exploration experience
- Significant exposure to Brownfield redevelopments and EOR projects
- Vegas Egypt, Burren Energy PLC, Petro -Canada International,
   Cairn Energy/Command Petroleum, Roxar Limited, Baker Hughes

#### Alex Hunter. CFO

- Appointed 14 April 2016
- 10y+ experience in resources/oil and gas M&A, capital raising and corporate finance
- Prior roles as General Manager BD-Drillsearch and Associate Director-RFC Corporate Finance
- Strong financial analytical & management skills
- Previous 10y experience in engineering, construction and infrastructure project management

#### Established Denver, Colorado based management team

- Scott Hornafius, President, Elk Petroleum Inc (USA)
- Brian Nolan, Chief Operating Officer, Elk Petroleum Inc (USA)
- Over 10-years Northern Rockies EOR experience

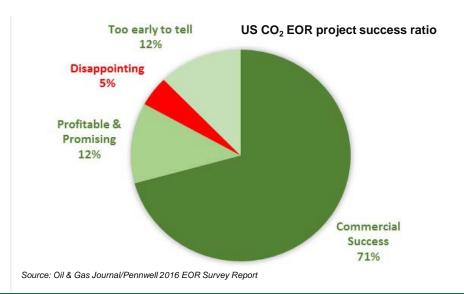


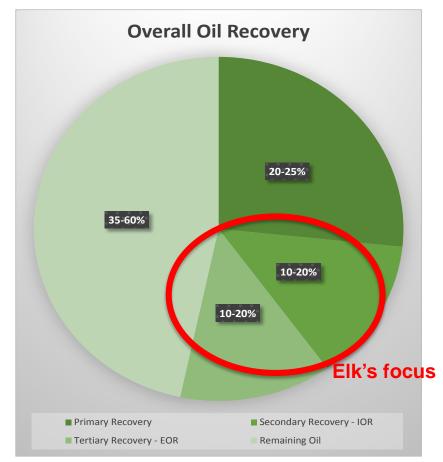
#### What is EOR?



# 'For every barrel of oil extracted from oil fields in primary recovery phase, there remains 3-4 barrels of stranded oil left in the ground'

- Specialist secondary & tertiary method of oil recovery
- Successfully deployed for nearly 50 years
- Can extract 20-40% more than primary recovery
- Substantially increase oil recovery & productive life
- Attractive economics even in low oil price markets
- Used extensively in North America & Middle East
- 136 CO2 EOR projects in North America
- Largely under-utilized in Australasia

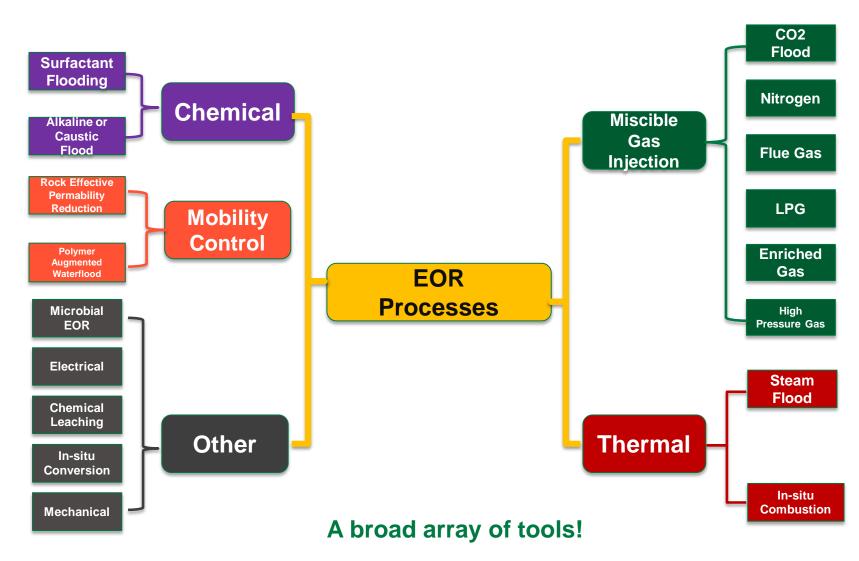




Source: Advances in Enhanced Oil Recovery Processes – Romero-Zeron – University of New Brunswick (2012)

#### **EOR – What are the tools?**

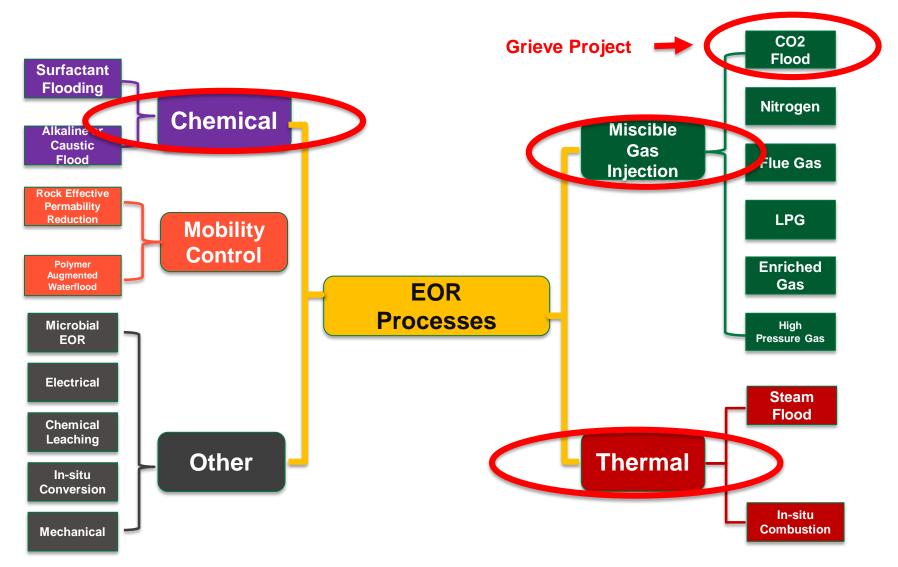




Source: Advances in Enhanced Oil Recovery Processes - Romero-Zeron - University of New Brunswick (2012)

# EOR – Elk's experience





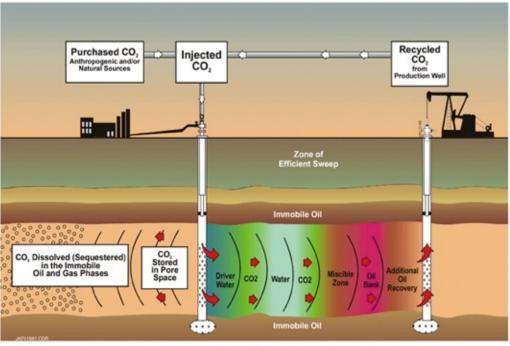
Source: Advances in Enhanced Oil Recovery Processes - Romero-Zeron - University of New Brunswick (2012)

# How does CO<sub>2</sub> EOR work?





- Known as 'Green Oil' as it sequesters more CO<sub>2</sub> than a new barrel of oil generates
- Most commonly-used form of EOR
- Most efficient EOR recovers most oil
- Accounts for ~60% of US EOR production
- CO<sub>2</sub> often sourced from natural deposits
- CO<sub>2</sub> can be supplied from man-made sources
- Only profitable form of carbon capture & storage (CCS) without subsidy

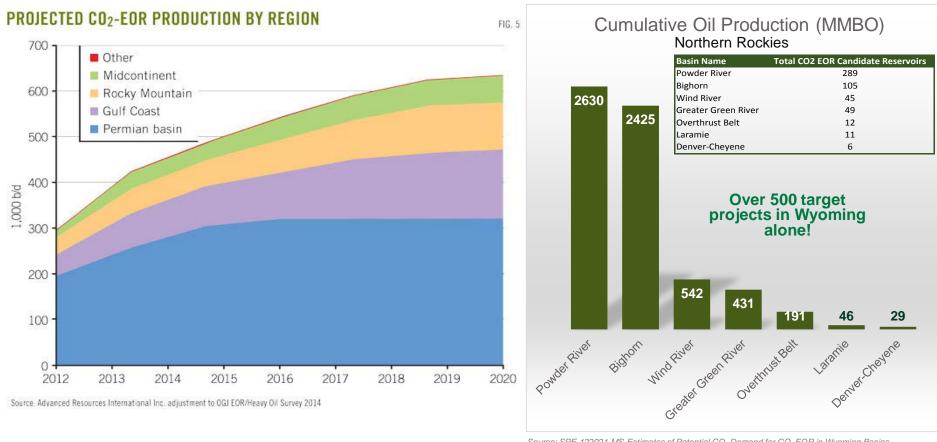


Source: Advanced Resources International and Melzer Consulting, Optimization of CO<sub>2</sub> Storage in CO<sub>2</sub> Enhanced Oil Recovery Projects, prepared for UK Department of Energy & Climate Change, November 2010.

Putting a cost on carbon emissions will only further enhance CO<sub>2</sub> EOR potential

# CO2 EOR – Big Business in US, Big Business in Rocky Mountains





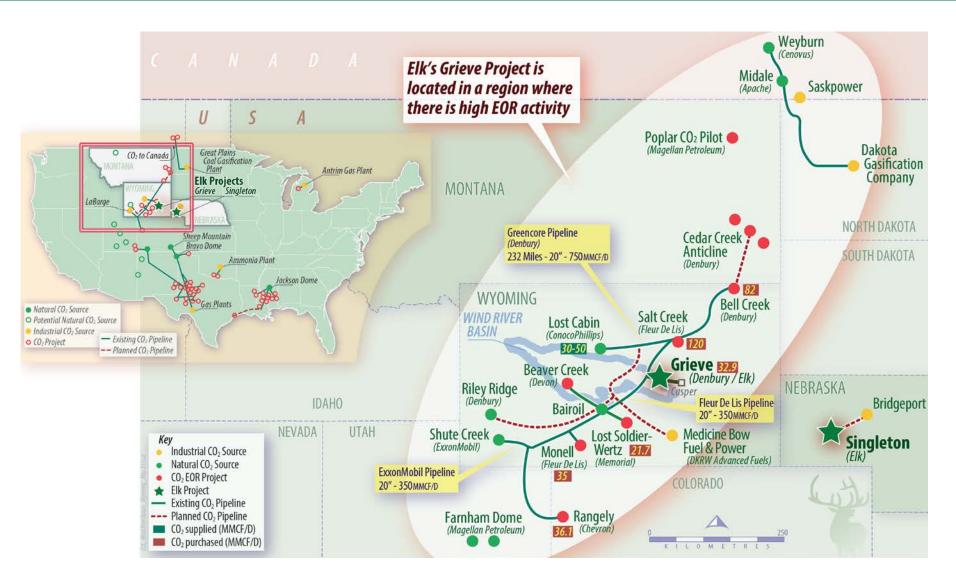
Source: SPE-122921-MS-Estimates of Potential CO2 Demand for CO2 EOR in Wyoming Basins

- First commercial CO<sub>2</sub> EOR production commenced in 1972
- ~100bn to 160bn barrels of stranded oil forecast for recovery by EOR technology\*
- 1.5bn barrels produced through CO<sub>2</sub> EOR over past 25 years\*\*

\*US Department of Energy
\*\*Visiongain Research, October 2014

# Elk Country — Wind River Basin, Northern Rockies, WY





## Grieve CO<sub>2</sub> EOR Project 75% complete



- Wind River Basin, Northern Rockies
- Easily accessible, well serviced, existing infrastructure
- Proposed agreement on JV restructure with Denbury (NYSE:DNR)\*
- Proposed new JV arrangements with superior project value\*
- Project over 75% complete
- Material increase in reserves
- Significant cost savings and controls
- Outstanding F&D and operating costs
- Robust and financeable economics
- Strong look forward economics
- Compares favourably to other top tier projects
- Significant additional income from 100% Elk oil export pipeline
- Operator Denbury, very experienced EOR operator
- First oil scheduled for late 2017

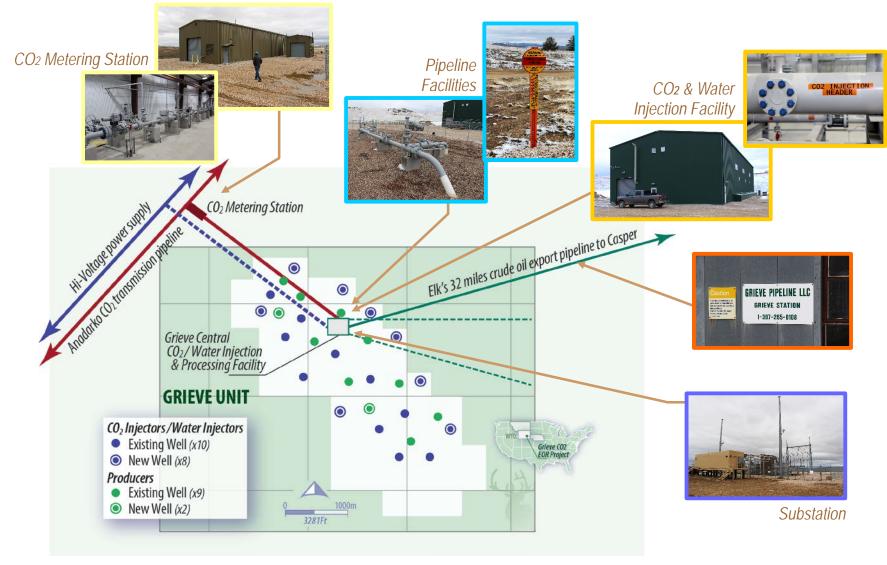
Grieve CO <sub>2</sub> EOR Project Reserves & Resources			
Scenario	Post JV Restructure (MMbbl)*		
	Gross	Net to Elk	
2P (Probable Reserves)	12.3	5.3	
3P (Probable + Possible Reserves)	16.4	7.0	
3C (Contingent Resources)	16.3	7.0	
*Net volumes to Elk subject to finalisation of proposed Grieve JV restructure			



\*Refer to Elk announcement dated 21 December 2015 for more detailed JV re-structure information

# **Grieve CO2 EOR Project – A Field-level View**





## CO<sub>2</sub> EOR – Wood MacKenzie's View





February 2015

# **Denbury Resources**

#### Enhanced oil recovery and the need for CO<sub>2</sub>

Tertiary CO2 flood operations are low-risk projects that provide consistent, organic production growth. However, these projects require a large amount of upfront capital and multi-year planning before the first production response is experienced. Access to low-cost CO2 reserves and CO2 transportation pipelines are key to Denbury's strategic advantage.

Elk's JV partner developing the Grieve CO2 EOR Project

# **Project Economics: Production Cost & Margin**



#### Production margins remain robust, even in low oil price conditions

Average Production Costs (Including Royalties)<sup>(1)</sup> of First 5 Years (US\$/bbl, Real)



<sup>(1)</sup> Includes all Elk's share of the Grieve Oil Pipeline cash flows

<sup>(2)</sup> Bloomberg (26 May 2016)

<sup>(3)</sup> Goldman Sachs Global Investment Research (13 May 16)

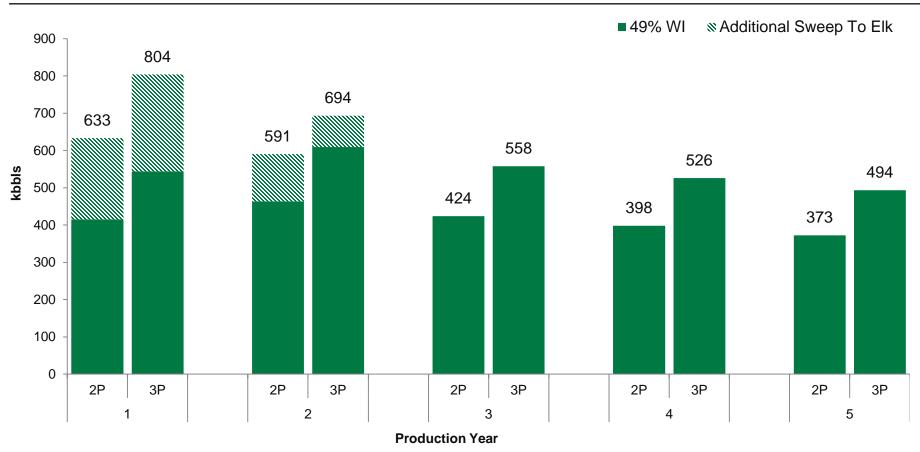
<sup>\*</sup>Subject to successful restructure of Grieve JV with Denbury and subject to other risk factors including as detailed in Section 4 of the Offer Booklet.

# **Grieve Production – Elk Net Share (Post Royalties)**



Elk's net share of production is estimated to be between 2.4 and 3.1 MMbbls over the first 5 years from first oil\*

2P & 3P Production (Net to Elk, Post Royalties)



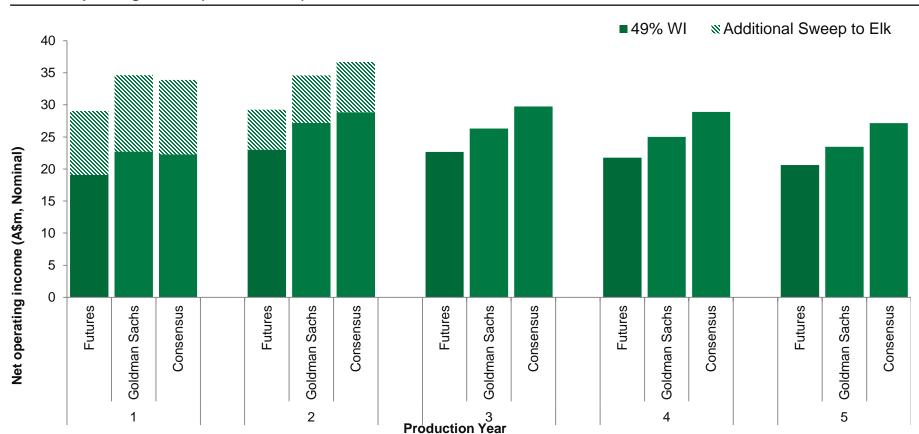
<sup>\*</sup>Subject to successful restructure of Grieve JV with Denbury and subject to other risk factors including as detailed in Section 4 of the Offer Booklet.

# **Profitability: Net Operating Income (Pre-Finance)**



#### The Project will generate strong and stable cash flows from first oil\*

#### Elk Net operating income (A\$m, Nominal) (1)



<sup>(1)</sup> Assumes 0.72 AUD:USD exchange rate

Pricing sourced from Bloomberg (26 May 2016) and Goldman Sachs Global Investment Research (13 May 16)

<sup>\*</sup>Subject to successful restructure of Grieve JV with Denbury and subject to other risk factors including as detailed in Section 4 of the Offer Booklet.

## **Grieve Project – Fully Funded**



#### Secured US\$58 million in senior debt funding

- Benefit Street Partners (BSP) providing US\$58 million in conventional oil field development financing
- BSP is credit unit of Providence Capital a recognized global asset management firm
- Full amount available at financial close

#### Elk is conducting a A\$30m+ Pro-Rata Non-Renounceable Entitlement offer ("Entitlement Offer")

- 1 New share for every Elk share held @ A\$0.075 per New Elk Share
- Total raising up to A\$30.8m with A\$21.7 million raised so far
- Additional A\$9.1 million to be raised via placement

#### Debt and Equity funds to be used to fully fund completion of Grieve Project development

- Direct Grieve project capex contribution
- Equity raising transaction costs
- Corporate working capital

#### Targeting financial close by 31 July 2016

# Why do we want to go down this path? - EOR Potential





# **Value-add Strategy**



# Asset Accumulation • Current oil price

 Current oil price environment provides opportunity to strengthen asset portfolio in existing geography and new markets

Take EOR technology to largely untapped regions Australia, Indonesia and Malaysia

Australasia Opportunity

Singleton Oil Field Redevelopment

 Execute work programs for Opis 1P & 1H and repressurise field for production

Grieve CO<sub>2</sub> EOR Redevelopment

• Complete

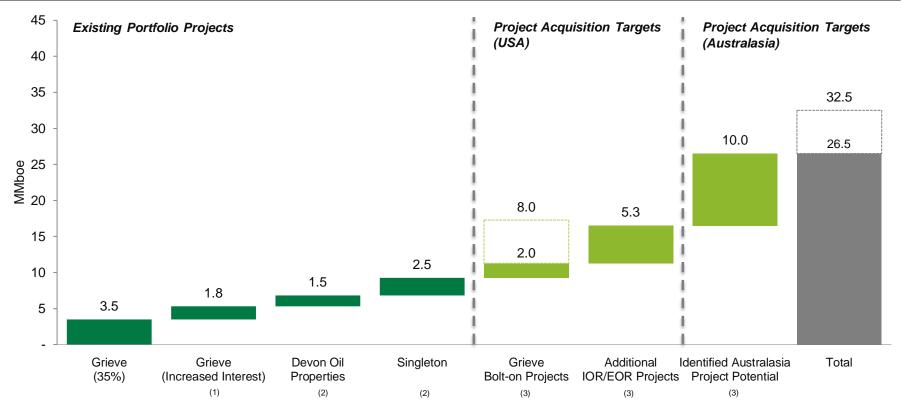
 Complete development, commence oil production

# **Beyond Grieve: Elk Growth Potential**



#### Elk has identified additional EOR opportunities that are achievable in the short to medium term

#### Potential 2P Volumes, Net to Elk



<sup>(1)</sup> Assuming an increased interest in Grieve reflecting current discussions with Denbury

Note: Volumes shown are rounded to 1 decimal place

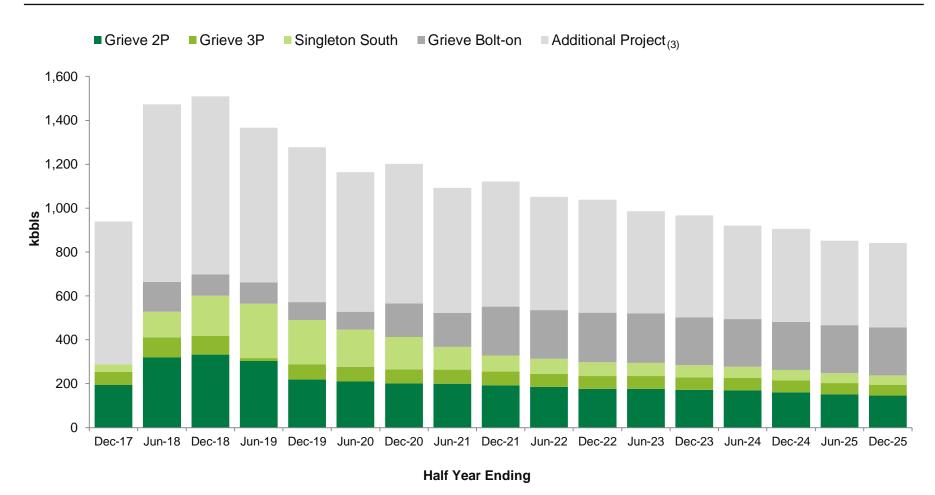
<sup>2)</sup> Assuming conversion of 2C resources into 2P reserves

<sup>(3)</sup> On the basis of initial exploratory engagement

## **Consolidated Forecast – Production**



#### Production Forecast (Elk Net Share Post Royalties) (1,2)

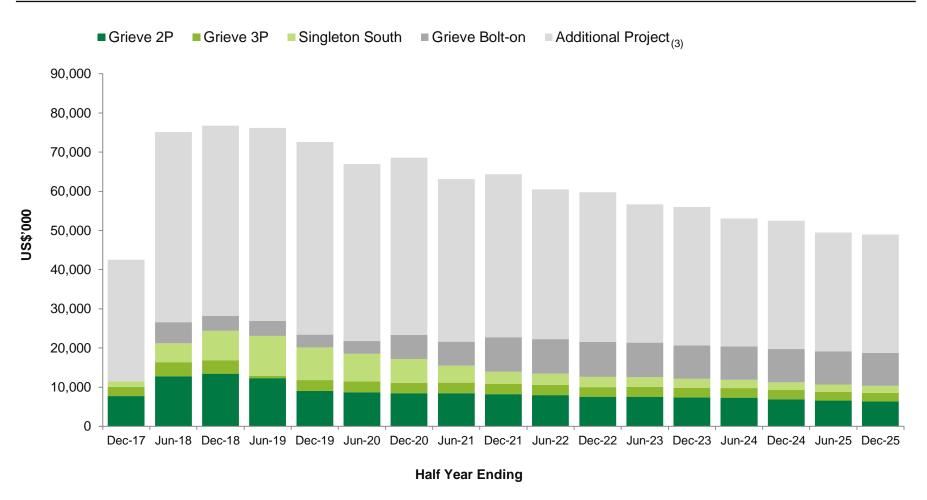


- (1) Assumes Singleton South development commences expenditure in September 2016
- (2) Assumes successful acquisition of Grieve Bolt-on Projects with development expenditure commencing in June 2017
- (3) Based on indicative 1P forecast

#### **Consolidated Forecast – Net Revenue**



#### Net Revenue (Elk Net Share) (1,2)

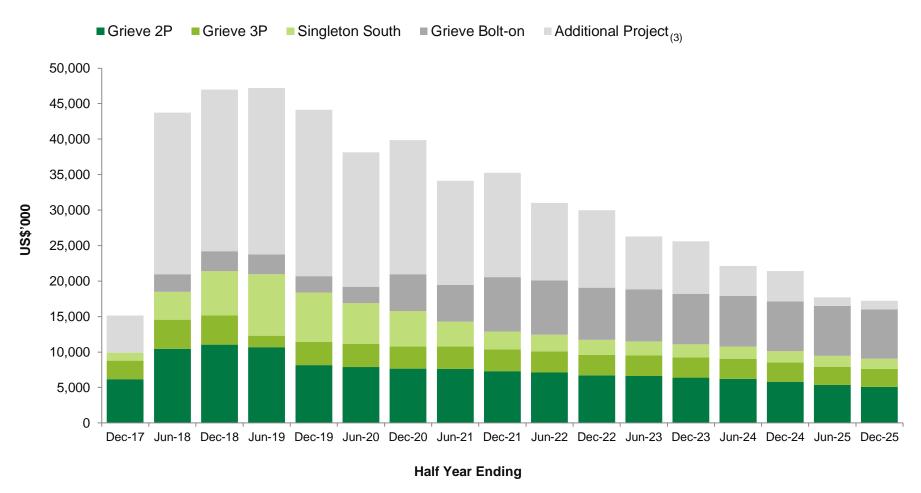


- (1) Based on futures pricing, sourced from Bloomberg (15 June 2016). Elk's net share of gross revenue less royalty oil and ad val orem taxes
- (2) Assumes successful acquisition of Grieve Bolt-on Projects with development expenditure commencing in June 2017
- (3) Based on indicative 1P forecast

#### **Consolidated Forecast – EBITDA**



#### EBITDA (Elk Net Share) (1,2)



- (1) Based on futures pricing, sourced from Bloomberg (15 June 2016). Net earnings, before all financing costs, tax, depreciation and amortisation
- (2) Assumes successful acquisition of Grieve Bolt-on Projects with development expenditure commencing in June 2017
- (3) Based on indicative 1P forecast

# **Key Takeaways – Investing in Elk**



- Only ASX-listed oil company focussed on enhanced oil recovery (EOR)
- Pipeline of high-quality projects from early stage to nearing completion
- Main projects are in the prolific Northern Rocky Mountain Oil Fairway in USA
- Company's flagship EOR Project the Grieve Project is over 75% complete and is anticipated to commence production late 2017/early 2018
- To deliver the Grieve Project, ELK has partnered with Denbury Resources, North America's leading EOR oil production company
- Under proposed new partnership arrangements Denbury is guaranteeing both cost and time for completion, and project start-up
- ELK has agreed to fund US\$55m, the last 30% of Capex, and will receive 75% of the operating profit from the first million barrels and 65% from the second million
- Significant annuity revenue to Elk from 100%-owned Grieve Oil Pipeline
- Annual net operating income for first 5-years averages A\$25-31 million pa<sup>(1,2)</sup>
- Grieve Project is repeatable and ELK has already identified additional projects with 20 miles of the Grieve Project supporting additional growth
- Grieve Project funding will come from combination of senior debt and new equity capital funding

## **Grieve Project Economics**

Project life	20 years
Capex invested to date	US\$120m
Remaining capex spend	US\$55m
Development cost (/bbl)	US\$7-10
Operating cost (/bbl) (Excluding royalties)	US\$12-16
Profit margin (/bbl) (first 5 years) <sup>(2,3)</sup>	US\$46-57
Total projected revenue (project life) <sup>(1,2,3)</sup>	A\$384-473m
First 5 years net operating income (annual)	A\$25-31 m/y

<sup>(1)</sup> Assumes 0.72 AUD:USD exchange rate

<sup>(2)</sup> Range: Futures to Bloomberg Consensus for 2P (12.3MMbbl) production profile (Pricing source: Bloomberg 26 May 2016)

<sup>(3)</sup> Inclusive of Grieve Oil pipeline revenue



# ELK PETROLEUM &

Elk Petroleum Limited
Exchange House
Level 1, Suite 101
10 Bridge Street
Sydney NSW AUSTRALIA