

# Warrego Energy Limited (ASX: WGO)

Drilling update 27<sup>th</sup> August – Kingia gas discovery better than expected

## Overview

Strike reported this morning that the joint venture had made a “significant gas discovery” in the Kingia sandstone that “appears to have higher reservoir quality than the Waitsia field”. Average porosity of 14% is above the 11-12% pre-drill prognosis, indicating expected good permeability and well deliverability when the well is tested in the coming weeks. The well is now drilling through the Bit Basher Shale on its way to the High Cliff target. We have revised our base case valuation to \$0.46/sh. (previously \$0.28) on success at the Kingia and retain our estimate of upside potential on exploration success at the High Cliff of \$0.63/sh.

## Key points

**Waitsia analogue:** Warrego has a 50% non-operated interest in EP 469, adjacent to the large (786 bcf gross 2P) Waitsia gas project (Beach/ Mitsui), ~300 km north of Perth. The West Erregulla-2 well is targeting the same formations that are productive at Waitsia. Gross mid-case resource estimates range from 377-1,163 bcf, depending upon the resource assessor.

**Drilling progress:** The well has drilled through the Kingia formation and is currently at 4,895 m, in the Bit Basher Shale, above the final primary target, the High Cliff formation. Planned TD remains at 5,200 m.

**Kingia discovery:** Strike reported a total Kingia formation of 117 m, with a gross gas column of 97 m and net pay of 41 m at a 10% porosity cut-off. Importantly, the average porosity of 14% (with peaks up to 19%) is better than the pre-drill prognosis of 11-12% at 4,700+m. We have revised our geological probability of success for the 454 bcf gross mid-case Kingia target from our pre-drill level of 21% to 100%, while retaining our commercial probability of success of 60%. Our base case valuation increases to \$0.46/sh (prev. \$0.28/share).

**Upside potential:** The Kingia may be larger than the mid-case, with Strike noting the results “have exceeded Strike’s highest expectations”, which included a pre-drill high case of 670 bcf. If this is achieved our valuation increases by \$0.10 to \$0.56/share. The High Cliff formation is yet to be intersected and if successful at the mid-case level our valuation increases to \$0.63/sh (and \$0.73/sh with the high case Kingia).

**Next steps:** Drilling through the Bit Basher Shale will be slow and may require another bit change before intersecting the High Cliff in the next few days. Wireline logging to measure permeabilities, formation pressures, fluid samples and cores of the Kingia (and High Cliff) will be undertaken after reaching TD. The well will then be cased and production testing undertaken.

**Near term news flow:** Strike, as operator, is following an event-driven cycle. The next report is likely to be late this week or early next week regarding results of the High Cliff formation.

**MiFID II compliance statement:** Bridge Street Capital Partners are Corporate Advisors to WGO and receive fees from WGO for services provided.

## SHARE PRICE PERFORMANCE



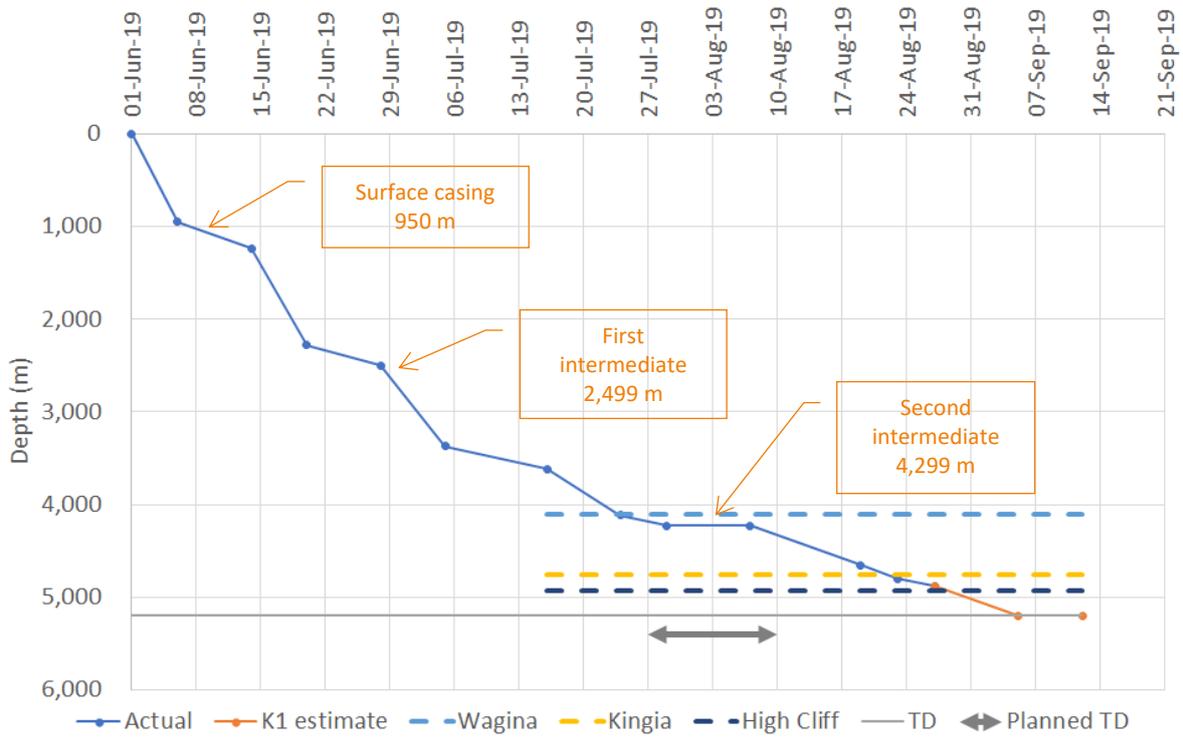
Closing price as of 26th August 2019

CAPITALIZATION	
Last price	\$0.185
52-week range	\$0.02-0.25
Capitalization	\$122m
Cash: 30 Jun	\$7m
Debt: 30 Jun	\$0m
EV	\$115m
Shares*	660.0m
Options/rights	7.7m
Conv Notes	~10m
Balance date	June
RESERVES AND PRODUCTION	
1P (30 Jun 19)	0.00 MMboe
2P “	0.00 MMboe
3P “	0.00 MMboe
2C “	0.00 MMboe
FY17a	0.00 MMboe
FY18e	0.00 MMboe
FY19e	0.00 MMboe
SHAREHOLDERS (%)	
Board	59.9
* includes shares to be issued to directors	
LEADERSHIP	
Chairman	Greg Columbus
MD/CEO	Dennis Donald

Disclosure: This is a commissioned research report and K1 Capital will receive a fee for preparing this report.

Author: John Young  
jayoung@K1capital.net.au

Figure 1 Estimated time-depth curve for West Erregulla-2 as of 27<sup>th</sup> August 2019



Source: Actual data from company announcements, forecast from K1 Capital estimate.

- 1) "Kingia-High Cliff sequence is currently expected to be intersected in mid to late August" per Warrego's June 2019 Quarterly Activities Report
- 2) Well depth not disclosed in Strike's 12 August 2019 drilling report. Only reference was that an "additional 5 metres of gas bearing Wagina sands drilled since last update".
- 3) Actual spud date not disclosed; assumed spud date of 1<sup>st</sup> June 2010 per Strike's 31<sup>st</sup> May 2019 ASX release.
- 4) Planned drilling campaign of 8-10 weeks per Warrego's "West Erregulla-2 Update & Capital Raising" presentation, 31<sup>st</sup> May 2019.

Figure 2 West Erregulla prospective resource - Strike Energy assessment

Reservoir	Gross prospective resource (Bscf)			Net attributable (Warrego 50%) (Bscf)		
	Low (P90)	Best (P50)	High (P10)	Low (P90)	Best (P50)	High (P10)
Basal Wagina	154	247	372	77	124	186
Kingia	283	454	670	142	227	335
High Cliff	324	462	627	162	231	314

**Notes**

- 1) These resource estimates are from Strike Energy's 23<sup>rd</sup> January 2019 ASX announcement
- 2) These resource estimates are un-risked
- 3) The estimated quantities of petroleum that may potentially be recovered by the application of a future development project(s) relate to undiscovered accumulations. These estimates have both an associated risk of discovery and a risk of development. Further exploration appraisal and evaluation is required to determine the existence of a significant quantity of potentially moveable hydrocarbons

Source: Petrel Energy Limited, Notice of Extraordinary General Meeting, 6th February 2019, p 2 of RISC report

Figure 3 Base case valuation summary

NPV @ 10.0% WACC+country factor Valuation as of 30 Jun 2019	Net volume mmboe	NPV value \$/US/boe	Risk factor %	Risked value M\$A	Risked value \$/A/sh	Unrisked value \$/A/sh	WACC %	Risked value \$/A/sh
<b>Projects (DCF model valuation)</b>	<b>0.0</b>			<b>0</b>	<b>0.00</b>	<b>0.00</b>		
Lochend Cadium tight oil	0.0	19.20	20	0	0.00	0.00	10.0	
<b>Exploration / Appraisal</b>	<b>245.2</b>			<b>313</b>	<b>0.42</b>	<b>2.19</b>		
EP 469 discovered gas	6.1	-	2	-	-	-		
West Erregulla Deep - Wagina	21.1	4.80	60	87	0.12	0.19		
West Erregulla Deep - Kingia	38.7	4.80	60	159	0.21	0.35		
West Erregulla Deep - High Cliff	39.4	4.80	7	19	0.03	0.36		
EP 469 Jurassic oil	9.4	7.90	8	9	0.01	0.14		
STP-EPA-0127	-	-	-	0	0.00	0.00		
Tesorillo (Spain) conv. gas	73.9	5.80	5	31	0.04	0.82		
Uruguay conventional	56.5	3.05	4	8	0.01	0.33		
<b>Other (corporate, cash, debt, etc)</b>				<b>34</b>	<b>0.05</b>	<b>0.05</b>		
Corporate costs				-4	-0.01	-0.01		
Hedging & Investments				-	-	-		
Franking credits (@ 0 %)				-	-	-		
Cash				11	0.01	0.01		
Additional Equity				26	0.03	0.03		
Debt				-0	-0.00	-0.00		
Minorities / Other				2	0.00	0.00		
<b>Equity Valuation @ base case</b>	-			<b>347</b>	<b>0.460</b>	<b>2.25</b>	Previous 0.28	
Equity Valuation @ spot prices @ \$US59/bbl real Brent & 0.67 f				-	-	-	0.00	
<b>Mkt Cap @ current share price</b> (and undiluted share count)				<b>122</b>	<b>0.185</b>			
<b>Total shareholder return (%)</b>					<b>n/a</b>			
Number of shares (undiluted)	000,000			660.0				
Number of shares (diluted)	000,000			748.2				

0.67 USD: AUD spot and 0.70 USD: AUD long term exchange rate. Per share valuation based on estimated post June 2019 capital raising share count of 660m shares (once all shares have been issued to Messrs Donald and MacNiven) plus, plus unlisted May 2021 options (assumed 7.0m). Includes additional \$20-30m equity for West Erregulla appraisal (50% of two wells at assumed \$18m each) on exploration success, plus G&A and Tesorillo expenditure commitments.

### 1.1.1 Gas resource valuation

We have assumed a gas resource value of \$0.70/GJ of mid-case resources. This is based on gas values for Waitsia derived from analysis of the independent expert's assessment for the AWE Target's statement and the two Waitsia-related M&A transactions. The Waitsia-derived numbers represented values for a fully appraised field close to the point of a final investment decision. We adjusted these estimates for two factors to provide an estimate appropriate for West Erregulla: (1) two years of time value for further appraisal at a 10% nominal discount rate, and (2) 60% commercial chance of success to account for West Erregulla project maturity (pre-development decision).

Table 1 Perth Basin gas resource value

	Gas value \$/GJ
AWE Target's statement independent expert's Waitsia DCF mid-case	1.42
AWE/Mitsui transaction simple EV/2P reserves multiple	1.23
Beach acquisition of 50% of Waitsia from Origin Energy EV/2P reserves multiple	1.16
Assumed value, adjusted for time value and commercial probability of success	0.70
Gas value = \$1.42 * 1.10 <sup>-2</sup> * 60% = ~\$0.70/GJ	

Source: K1 Capital analysis

\*\*\*\*\*

### K1 Capital disclosures

**Disclosure:** K1 Capital Pty Ltd (K1 Capital) was commissioned by Bridge Street Capital Partners (BSCP) to prepare this research report on Warrego Energy Limited (Warrego) and will receive a fee for preparing this report. The user of this report is BSCP and persons designated by them. K1 Capital has prepared this report based on publicly available information. K1 Capital has not undertaken a site visit to Warrego's projects. To the best of K1 Capital's knowledge full, accurate and true disclosure of all material information was provided by Warrego. Given the potential for a perceived conflict of interest it is K1 Capital's policy not to include a share price target or investment recommendation for commissioned research.

K1 Capital is the trading brand of K1 Capital Pty Limited, Australian Business Number (ABN) 25 614 078 714, AFS Licence number 493121. K1 Capital and/or its associated entities, directors and/or its employees may have a material interest in securities referred to in this report, or may provide services to, or seek to do business with, companies referred to in this report. Hence investors should be aware that K1 Capital Pty Limited may have a conflict of interest that could affect the objectivity of this report.

The analyst discloses that when conducting site visits to inspect company assets the analyst may receive assistance from the company or companies involved. This assistance may include transport, accommodation, incidental expenses, and the provision of safety equipment.

This document is current at the date of the issue but may be superseded by future publications.

**Disclaimer:** Whilst K1 Capital believes the information contained in this communication is based on reliable information, no warranty is given as to its accuracy and persons relying on this information do so at their own risk. To the extent permitted by law K1 Capital and its associated entities accept no liability for any loss or damage caused by any error in, or omission from, this document. Any projections contained in this communication are estimates only. Such projections are subject to market influences and are contingent upon matters outside the control of K1 Capital and therefore may not be realized in the future.

This document is not an offer to buy or sell or the solicitation of an offer to buy or sell any security or instrument or to participate in any trading strategy.

This document is intended to provide general financial product advice only and has been prepared without taking account of your objectives, financial situation or needs. Therefore, before acting on advice contained in this document, you should consider its appropriateness having regard to your objectives, financial situation and needs. If any advice in this document relates to the acquisition or possible acquisition of a financial product, you should obtain a copy of, and consider, the Product Disclosure Statement, prospectus or other disclosure material for that product before making any decision. Investments can go up and down. Past performance is not necessarily indicative of future performance.

**Analyst Certification:** The analyst certifies that the views expressed in this research accurately reflect the analyst's personal views about the subject company, its assets, securities or issuers; and no part of the analyst's compensation was, is, or will be directly or indirectly related to the specific recommendations or views expressed herein.

**Copyright © 2019 K1 Capital Pty Limited:** This publication may be reproduced in part for educational or non-profit purposes without special permission from the copyright holder, provided acknowledgment of the source is made. No use of this publication may be made for resale or for any other commercial purpose whatsoever without prior permission in writing from K1 Capital Pty Limited.

\*\*\*\*\*

\*\*\*\*\*

### Bridge Street Capital Partners Disclosures

By downloading this report you acknowledge receipt of our Financial Services Guide, available on our web page [www.bridgestreetcapital.com.au](http://www.bridgestreetcapital.com.au).

Bridge Street Capital Partners Pty Ltd (BSCP) is licensed to provide financial services in Australia; CAR AFSL 456663; Level 14, 234 George Street, Sydney NSW 2000

Bridge Street Capital Partners Pty Ltd is providing the financial service to you.

### General Advice Warning

Please note that any advice given by Bridge Street Capital Partners Pty Ltd or its authorised representatives (BSCP) is GENERAL advice, as the information or advice given does not take into account your particular objectives, financial situation or needs. You should, before acting on the advice, consider the appropriateness of the advice, having regard to your objectives, financial situation and needs. If our advice relates to the acquisition, or possible acquisition, of a particular financial product you should read any relevant Prospectus, PDS or like instrument.

### Disclaimers

BSCP is a Corporate Advisor to Warrego Energy. It has commissioned K1 Capital Pty Ltd to prepare this report and will pay a fee to K1 Capital. BSCP does not warrant the accuracy of any information it sources from others. BSCP provides this report as an opinion held at a point in time about an investment or sector. BSCP has no obligation to update the opinion unless you are a client of BSCP. Assessment of risk can be subjective. Historical information may not translate into future performance. Portfolios of investments need to be well diversified and the risk appropriate for the investor. BSCP does not stand behind the capital value or performance of any investment. To the fullest extent permitted by the law, BSCP disclaim any liability for any loss or damage arising from the use of, or the reliance on, any information within the report whether or not caused by any negligent act or omission of BSCP. Overseas investors acknowledge that BSCP has not solicited their business and that they have accessed this report while searching for information on Australian companies.

### Additional Disclosures

BSCP is a corporate advisory firm that earns fees from providing services to clients. It has earned fees from providing services to Petrel Energy in the past. BSCP is a Corporate Advisor to Warrego Energy and expects to earn fees from that company for providing corporate advisory services. Mr Alex Sundich, a director of Bridge Street Capital Partners, was a non-executive director of Petrel Energy as of the date of this report but will be stepping down from the Board upon completion of the merger with Warrego Energy. My Sundich is a shareholder of Petrel Energy.

## 1.2 Appendix 1

1.2.1 **US Disclaimer:** This investment research is distributed in the United States by Bridge Street Capital Partners Pty Ltd and in certain instances by Enclave Capital LLC (Enclave), a U.S.-registered broker-dealer, only to major U.S. institutional investors, as defined in Rule 15a-6 promulgated under the U.S. Securities Exchange Act of 1934, as amended, and as interpreted by the staff of the U.S. Securities and Exchange Commission. This investment research is not intended for use by any person or entity that is not a major U.S. institutional investor. If you have received a copy of this research and are not a major U.S. institutional investor, you are instructed not to read, rely on or reproduce the contents hereof, and to destroy this research or return it to Bridge Street Capital Partners Pty Ltd or to Enclave. The analyst(s) preparing this report are employees of Bridge Street Capital Partners Pty Ltd who are resident outside the United States and are not associated persons or employees of any U.S. registered broker-dealer. Therefore, the analyst(s) are not subject to Rule 2711 of the Financial Industry Regulatory Authority (FINRA) or to Regulation AC adopted by the U.S. Securities and Exchange Commission (SEC) which among other things, restrict communications with a subject company, public appearances and personal trading in securities by a research analyst. Any major U.S. institutional investor wishing to effect transactions in any securities referred to herein or options thereon should do so by contacting a representative of Enclave. Enclave is a broker-dealer registered with the SEC and a member of FINRA and the Securities Investor Protection Corporation. Its address is 19 West 44th Street, Suite 1700, New York, NY 10036 and its telephone number is 646-454-8600. Bridge Street Capital Partners Pty Ltd is not affiliated with Enclave or any other U.S. registered broker-dealer

\*\*\*\*\*