

## Indices and Prices

All Ordinaries	6,150
Energy Index	10,904
Brent AU\$/bbl	\$ 80
AUS\$/US\$	\$0.800
Live Gold/AU\$	\$1,676

As at close 23 January 2018

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## Buru Energy – 2018 & beyond

### Capital Structure: BRU

Shares	432.0 m.
Options	4.6 m.
Price	\$ 0.36
Market Cap	\$ 153 m.
Cash (est)	\$ 19 m.
Debt	\$ 7.5
EV	\$ 142 m.
EV/2C	\$ 0.94 /BOE
EV/2C	\$ 0.16 /Bcfe

**Recommendation:** Following a successful development programme at its 100% owned Ungani oilfield, Buru is likely to expand estimated Reserves towards 10 mmbbls and plans to lift production capacity to a plateau level of ~1 million barrels per year by April '18, if it ever stops raining in the Kimberley!

Operating cash flow of about \$11 million per quarter from mid-'18 will sustain the company's exploration and development activities as it works to attract funding from farminees willing to take equity in individual prospects.

The company's top five prospects for farm-out will address a total Prospective Resource of 248 mmbbls of oil plus 3.6 Tcf of gas. Depending on retained equity and funding arrangements, StockAnalysis values success at all the company's initial high potential prospects at close to \$3 per share for Buru, underpinned by a value of ~40 cps for Ungani alone.

The company is a speculative buy with value underpinned by an estimated upgraded ~10 mmbbl Ungani oilfield plus significant risked value ascribed to an active exploration programme during CY 2018.

Buru Valuation	\$m	Dil/shr
Ungani	\$114	\$0.23
Ungani-4	\$ 67	\$0.14
Ungani-5	\$ 10	\$0.02
Cash (est)	\$ 19	\$0.04
New Equity (assumed)	\$ 20	\$0.04
Debt	-\$ 8	-\$0.02
Corporate	-\$ 10	-\$0.02
<b>Sub-total</b>	<b>\$213</b>	<b>\$0.44</b>
Risked Ungani trend	\$203	\$0.42
Risked Yulleroo 2C	\$ 37	\$0.08
Risked Butler	\$ 33	\$0.07
Risked Other Exploration	\$166	\$0.34
	<b>\$652</b>	<b>\$1.34</b>

Source: Strachan Corporate

### GOLD LIVE AU\$



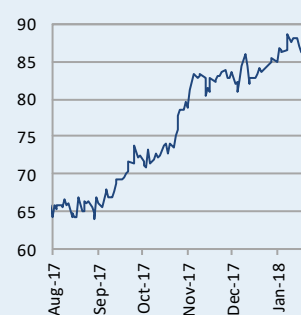
### ALL ORDINARIES



### S&P ASX 200 ENERGY INDEX



### BRENT CRUDE OIL \$AU/BARREL

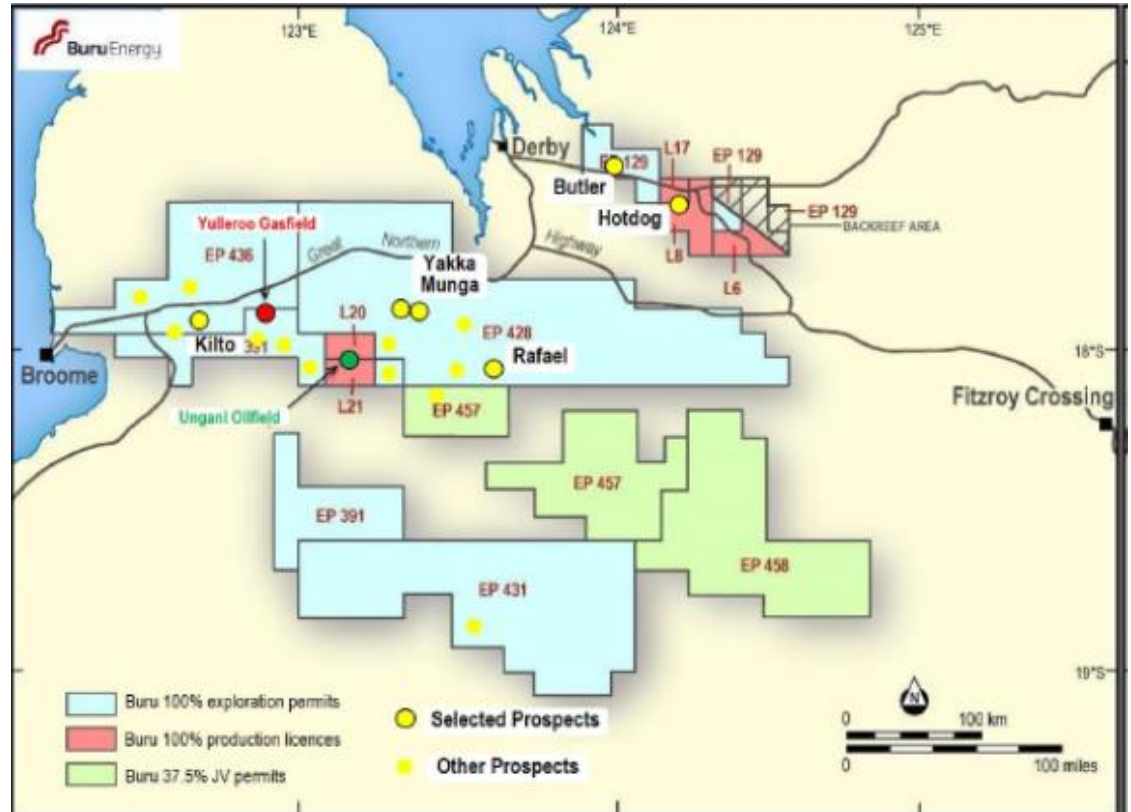


### AU\$/US\$



Over the past decade Buru has gathered an enormous trove of Canning Basin geological knowledge. Combined interpretations from 2D & 3D seismic surveys and follow-up drilling has enabled finer calibration of sediments in the Basin and delivered a deeper understanding of the petroleum systems operating in that vast area on the north and south of the Fitzroy Trough and also in the basin-centred tight sandstones that host huge volumes of gas and condensate.

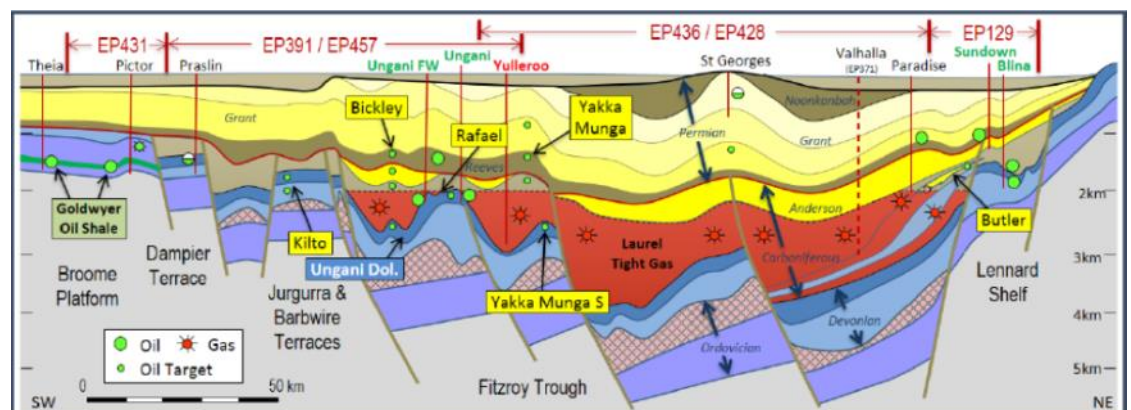
## Buru's permit interests & prospect locations



Source: Buru

After several years of gathering seismic data and drilling, Buru has built up a strong knowledge base on the Canning Basin. The company identifies several petroleum 'play types' in sediments of predominantly Devonian age along with large basin-centred and stratigraphic gas targets in Carboniferous aged sandstone units as well as targets in younger Permian age rocks.

## Cross section from SW to NE across the Fitzroy Trough



Source: Buru

When seismologists collect seismic survey data they send a pulse of energy into the earth. That 'noise' or energy pulse travels through the earth's crust and just like light or sound, it travels at a different speed depending on the characteristics of the host rock, including its density. Energy pulses are reflected and refracted from 'events' in the sedimentary

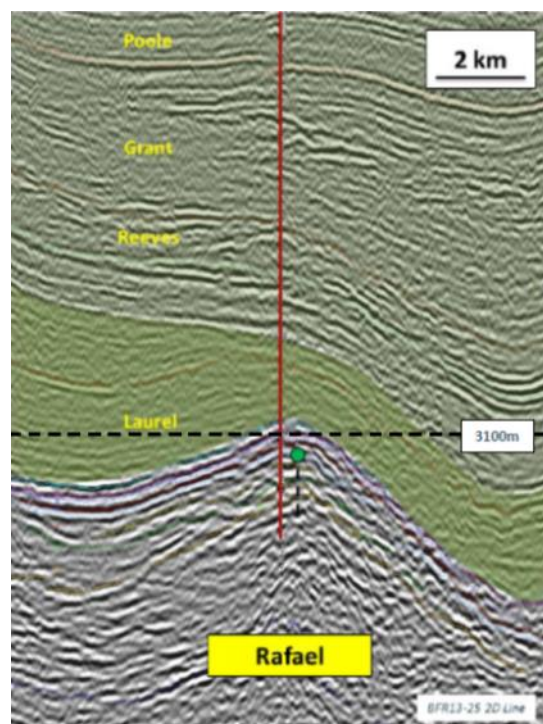
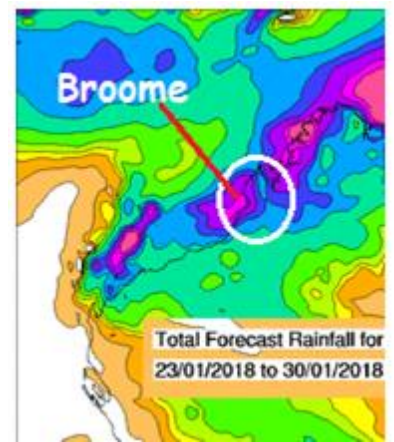
sequence. Reflected 'noise' is captured by a series of monitors at the surface to form the basis of a depth time series that can be interpreted to illustrate the form and composition of underlying sediments. A pulse of energy may speed up or slow down depending on whether sediments are more or less dense. A pulse will be reflected if sediments change rapidly from dense and compact shale into porous sandstone, basalt or limestone. Tectonic events like a fault or a sedimentary or erosion event such as an unconformity can also be imaged along with other tectonic characteristics.

An initial image created by this process is a time image, showing the time taken for an energy pulse to travel to an event and back again! Seismologists do their best to try and calibrate the time line and convert it into a depth interpretation, based on what they think and know about the quality of sediments or volcanic rocks at depth. Often geologists get this part spectacularly wrong. One bright company once began drilling onshore in the York Peninsula with a large stated target for gas in sediments at about 1,800 metres, only to hit crystalline basement rocks at about 680 metres. Very embarrassing!

Buru has acquired a vast array of seismic data and now has actual drilling data that it can use to more accurately calibrate and convert its seismic data from a time to depth scale. Planned exploration drilling is now based on a much more accurate knowledge of sediments and how they react to seismic pulses as well as a regional knowledge of reservoir characteristics and petroleum systems.

The current plan to bring the Ungani field back into production after a wash-out caused by Cyclone Joyce and to test U-4 & U-5 is being delayed by ongoing wet weather, which is the usual state of affairs in January and February each year. Buru is on track to flow test the U-4 & U-5 wells in early February, once packers inserted down-hole across the reservoir section have swollen into place.

Given predictions for heavy rain at the end of January, transporting oil to the loading station at Wyndham Port is unlikely to resume until well into February when the access roads become passable.



Prospective Resources - Refer Cautionary Statement			
Recov. Oil mmbbls	Low	Best	High
Rafael	36	75	138

Longer term and depending on exploration success at up-coming Ungani look-a-like structures, a central processing facility could be established at Ungani along with pipeline access to an all-weather loading station near the tarmac covered road, ~35 kilometres north, providing all-weather access for oil transport to a port.

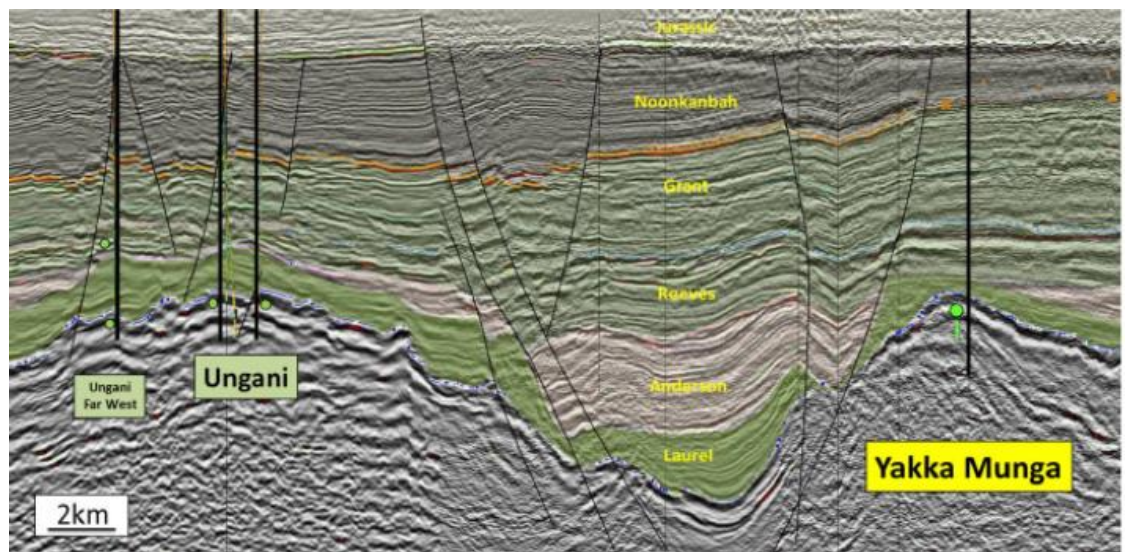
A prime candidate for exploration drilling is the **Rafael prospect**, which is estimated with a Best-case target of 75 million barrels and up to 138 million barrels in the High Case scenario. Where **else in Australia can an oil company drill for an onshore prospect that offers up to 100 mmbbls of recoverable oil?** Clearly this is a very valuable target where discovery could have an insitu value of over \$1.1 billion.

This target is approximately 16 times larger than Ungani and its reservoir target has similar seismic characteristics to that at Ungani.

Rafael is in a similar structural setting to Ungani but offers a possible oil column of 300 metres, compared with up to 100 metres at Ungani. Rafael is also interpreted to have a better overlying oil seal than Ungani below a 29 km<sup>2</sup> closure.

The **Kilto** prospect sits 50 kilometres to the west of Ungani and is just 50 kilometres from Broome. It is interpreted to hold dolomite reservoir at about the same depth as at Ungani in a faulted horst block location where a target range for low-best-high recoverable oil of 7 -16-40 million barrels has been estimated. While Kilto is smaller than Rafael, it is favoured for its potential to open up many smaller oil prospects found on 3D seismic data along the Kurrajong trend. This factor moved Kilto up the ranks as it would stand alone, even at 7 mmbbls and if successful, would high-grade several additional leads and prospects.

The **Yakka Munga** prospect targets the same primary Devonian dolomite as Ungani, with a Best estimate of 29 million barrels of oil, along with overlying potential in the Reeves and Anderson Formations for similar sized accumulations, lifting total target towards 60 mmbbls of oil.



Source: Buru

Yakka Munga sits on a major regional structure that is 11 kilometres by 4 kilometres offering up to 1,000 metres of vertical relief, with the top dolomite at a depth of 2,300 metres, just 200 metres deeper than at Ungani. Yakka Munga sits on the same anticlinal trend as Ungani and is sealed by the same Laurel Shale, all adjacent to the oil source kitchen!

## EXPLORATION VALUE MATRIX

Prospect	WI %		Target				Success Value \$/share	POS %	Cost \$m	Risked Value \$/share
	Now	Ret	Gas Bcf	Oil mmbbl	NPV Gas	NPV Oil				
Ungani Far West	100%	100%	-	0.4	0.20	20	\$ 0.02	80%	2	0.009
Ungani-4	100%	100%	-	3	0.20	20	\$ 0.12	95%	2	0.113
Ungani-5	100%	100%	-	1	0.20	20	\$ 0.02	95%	6	0.007
Yakka Munga	100%	40%	-	29	0.20	15	\$ 0.36	25%	-1	0.092
Rafael	100%	40%	-	75	0.20	15	\$ 0.92	30%	0	0.277
Kilto	100%	40%	-	16	0.20	15	\$ 0.20	25%	1	0.048
Butler Convent'l	100%	30%	1,500	32	0.20	12	\$ 0.42	7%	1	0.029
Butler EP-129 Unco	100%	20%	2,100	74	0.20	12	\$ 0.53	7%	3	0.032
Hotdog EP-129	100%	30%	-	22	0.20	12	\$ 0.16	15%	0	0.025
Additional prospects	100%	20%	-	803	0.20	12	\$ 3.95	5%	43	0.110
Bickley Anderson	100%	40%	-	35	0.20	14	\$ 0.40	12%	3	0.043
Bickley - Reeves	100%	40%	-	19	0.20	14	\$ 0.22	12%	2	0.022
Wright	37.5%	15%	-	80	0.20	12	\$ 0.30	15%	1	0.043
Yulleroo	100%	20%	714	25	0.40	12	\$ 0.24	30%	-1	0.075
Yulleroo area	100%	15%	302	12	0.40	12	\$ 0.08	6%	1	0.002

Source: Strachan Corporate Pty Ltd

Until we know what sort of farm-out deal Buru can negotiate on shareholders' behalf, assessing value is largely guesswork.

While production is currently halted at Ungani, its oil remains safely in the ground and is growing in value as the price of oil recovers! When production resumes in February, a strong cash flow will support Buru and limit its need to farm-down. While some shareholders may urge the company to drill high impact prospects with 100% equity, that

strategy could backfire. StockAnalysis thinks that it will be prudent to attract a partner that can offer long term support and add value to the project for Buru's shareholders through either technical or commercial links.

Buru has identified largely conventional leads and prospects with prospective Resources of at least 2 billion barrels of oil equivalent on its 100% held permits. Additional tight oil and gas potential exists beyond these prospects. Drilling planned from May until October 2018 holds great excitement for shareholders.

Success at U-4 & U-5 looks set to trigger an investment proposal to re-route oil exports from Wyndham to Broome, with a transport cost saving of ~A\$10/bbl or \$10 million pa. Buru is likely to seek a build-own and operate solution that would have little impact on its balance sheet.



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