#### 14 Oct 2021

Ticker:	Current Price:
ASX:BRK	A\$0.025
FWB:8F3	EUR0.0145

Market Data				
52-Week Range (A\$)	0.005 - 0.041			
3mth Avg Vol (Mil)	22.4			
Market Cap (A\$Mil)	83.5			
Shares Out. (Mil)	3,338.7			
Enterprise Value (A\$Mil)	70.4			
Est. Cash (A\$Mil)	13.1			
Total Debt as of 9 July 2021 (A\$Mil)	0			

Options Outstanding					
Options @ strike price	Units (Mil)	Expiry Date			
BRKOA @ A\$0.011	1,659.1	30-Jun-22			



#### Top 5 Shareholders

Magnolia Capital

Merchant Funds Management	6.33%
Pty Ltd	(Oct-21)
Great Southern Flour Mills Pty	3.20%
Ltd	(Oct-21)
BNP Paribas Nominees Pty Ltd	2.67% (Oct-21)
CS Fourth Nominees Pty Ltd	1.59% (Oct-21)

1.55%

(Oct-21)



### Brookside Energy (ASX: BRK) Desk Note

Cyprus Sia | Analyst | Spark Plus Pte Ltd. | cyprus@sparkplus.org

The Old Economy Strikes Back. Brookside Energy (BRK) commissioned its 1st operated O&G well in Oklahoma in its SWISH Area Of Interest in Sep 2021, at the right time to capitalize on the rising O&G prices. Over the past 2 months, O&G prices surged 22.2% & 44.4% respectively uplifting many US O&G companies' share price with an average gain of 45%. However, BRK's share price slid 11.1% over the same period essentially creating a gap. We believe the market has overlooked BRK joining the ranks of a producer which created this near-term 63% upside opportunity as the gap closes.

#### What's the Spark?

Riding the wave of rising O&G prices. O&G prices have climbed significantly in 2021, gaining 64% to US\$78/bbl & 130% to US\$5.90/MMBtu in the US (5x or more in EU and Asia) driven by a reduced supply and a faster than expected rise in demand. As the world emerged from the COVID-19 lockdown, ramping up of supply to meet demand has seen hiccups from the likes of Hurricane Ida and the evolving COVID-19 strains. This has caused O&G inventories to reach the level of depletion and risk of a blackout in many countries including China and the UK to the extent that government has to tap into their national oil reserves to ease the situation. The tight O&G supply is expected to persist in 4Q2021 with analysts expecting prices to hit US\$100/bbl & above US\$/8MMbtu in the 4th quarter.

**Strong pipeline of wells to be commissioned over the next 5 years**. BRK is on a 5-year, 20+ well drilling program which aims to commission about 1 well per quarter over the next 5 years. This program targets the conservative prospective 11.6M BOE reserves within its 3 drilling spacing units (DSUs) in the Anadarko Basin in the USA. The Jewell Well was the 1<sup>st</sup> well commissioned under the program in Sep 2021 and the company is already advancing on drilling for its 2<sup>nd</sup> well.

Beating estimates for a potential earnings surprise in FY2021. The Jewell Well has recorded initial production rates of 1,727 BOEPD, with 82% being liquids, and still climbing. This has exceeded its high side estimate of 1,500 BOEPD. Liquids production includes oil (US\$78/BOE) and natural gas liquids (US\$54/BOE) which fetch a higher price than gas (US\$34/BOE), with BRK placed to fully capitalize on the increased pricing environment due to it being unhedged. Coupled with today's higher O&G prices as compared to June 2021, we can now expect a much faster payback and a higher rate of return (ROR) on Jewell Well than its estimated 14 months and 82% ROR.

**Potential 184% upside to a compelling NPV**<sub>8</sub> of **A\$288.9M.** We derived our NPV<sub>8</sub> of US\$210.1M (A\$288.9M) or some 2.84x its current diluted market capitalization of A\$101.7M based solely on the 5-year, 20+ well program with the assumption that the remaining 20 wells perform similar to the Jewell Well estimate. We believe this will normalize the potential outperforming and underperforming wells in the future.



#### **Company Overview**

Brookside Energy ("BRK") is an oil and gas (O&G) producer with a focus on expanding and developing its O&G assets in the Anadarko Basin in Oklahoma. The Company operates on 3 pillars:

- Operated Drilling where it develops and operates producing wells within the Anadarko Basin through its controlled subsidiary, Black Mesa Energy. BRK's priority is to develop its "core of the core" acreage position in the SWISH area of interest (AOI) located in the Sycamore-Woodford trend in the southern SCOOP Play of Anadarko Basin. The Company's mid-term strategy is to tap into its conservative 11.6M net barrels of oil equivalent (BOE) resource (best estimate, unrisked) through a 5-year, 20+ well development drilling program across its 3 drilling spacing units (DSUs) – Jewell, Flames, and Rangers.
- 2) Producing Property Acquisitions through the Orion Project Joint Venture with Stonehorse Energy (ASX:SHE).
- 3) Land and Leasing or the "Real Estate Development" strategy where the Company acquires prospective acreages within the Anadarko Basin, adds value through consolidating leases and proving O&G reserves, and reselling it at a higher value or retains a working interest in them.

#### BRK's 3 pillars of operations



**Delivering Results, Profits and Sustainable Growth** 

#### Acreage held as of 31 June 2021

COUNTY	INTEREST ACQUIRED OR (DISPOSED) OF DURING THE QUARTER	TOTAL ACRES	WORKING INTEREST	
Blaine County, Oklahoma	Nil	~430 acres	Working Interest	
Garvin County, Oklahoma	Nil	~305 acres	Working Interest	
Stephens & Carter Counties, Oklahoma	Nil	~2,200 acres	Working Interest	
Murray County, Oklahoma	Nil	~40 acres	Working Interest	

#### Table 1: Producing Property portfolio as of 30 June 2021

Well Name	WI	OPERATOR	STATUS
JEWELL 1-13-12SXH	90.00%	Black Mesa Energy, LLC	WOC
FLAMES 10-3-WH1	58.59%	Black Mesa Energy, LLC	Permitting
MITCHELL 12-1	50.0%	Black Mesa Energy, LLC	Producing
THELMA 1-32	50.0%	Black Mesa Energy, LLC	Producing
RANGERS #1-36-WH1	41.25%	Black Mesa Energy, LLC	Permitting
CARTER 12-1	36.98%	Black Mesa Energy, LLC	Producing
NEWBERRY	21.7%	Black Mesa Energy, LLC	Producing
HERRING 1-33 1513MH	18.18%	Triumph Energy, LLC	Producing
COMPTON 2-8	9.46%	Mustang Fuel Corp.	Producing
BULLARD 1-18-07UWH	5.21%	Rimrock Resource Operating, LLC	Producing
HENRY FEDERAL 1-8-5XH	4.43%	Continental Resources, Inc.	Producing
CAULEY 1-7	4.22%	Devon Energy Corp.	Shut-In
GERHARDT 1-7	4.22%	Devon Energy Corp.	Shut-In
TRIM UNIT 1	4.22%	Devon Energy Corp.	Shut-In
DR NO 1-17-20 1611MHX	3.79%	Triumph Energy, LLC	Producing
MOTE 1-26-23UWH	3.20%	Rimrock Resource Operating, LLC	Producing
SPHINX 26 23-16N-11W-1XH	2.89%	Devon Energy Corp.	Producing
ROSER 1611 1-3-34MXH	2.80%	Marathon Oil Co.	Producing
KEVIN FIU 1-20-17XH	2.21%	Continental Resources, Inc.	Producing
LADYBUG 27 22-15N-13W 1HX	2.15%	Devon Energy Corp.	Producing
LANDRETH BIA 1-14H	1.80%	Marathon Oil Co.	Producing
DAVIS 1-8-1611MH	1.17%	Triumph Energy, LLC	Producing
STRACK 1-2-11XH	1.02%	Marathon Oil Co.	Producing
MIKE COM 1H-0706X	0.38%	Cimarex Energy, Co.	Producing
CENTAUR 7_6-15N-10W 3HX	0.29%	Devon Energy Corp.	Producing
CENTAUR 7_6-15N-10W 2HX		Devon Energy Corp.	Producing
CENTAUR 7_6-15N-10W 4HX	0.28%	Devon Energy Corp.	Producing
CENTAUR 7_6-15N-10W 5HX	0.28%	Devon Energy Corp.	Producing
LEON 1-23-14XHM	0.17%	Continental Resources, Inc.	Producing
BIFFLE 22-15 UW1H	0.16%	Cheyenne Petroleum, Co.	Producing
BOARDWALK 1-5MH	0.15%	Continental Resources, Inc.	Producing
LEXINGTON 1-32-29XHW		Continental Resources, Inc.	Producing
ESSEX 1R-12-13-24XHW	0.04%	Continental Resources, Inc.	Producing
ZENYATTA 28-33-1-4 1WXH		Roan Resources, LLC.	Producing
RINGER RANCH 1-20-17XHM		Continental Resources, Inc.	Producing
GRAMERCY 1-32-5-6-8XHW		Continental Resources, Inc.	Producing
McKINLEY 13&24 15-13	0.00%	Continental Resources, Inc.	ORRI Only
Note: Working interest per	ontogo	e may change cubicet to the ice	Sup of fina

Note: Working interest percentages may change subject to the issue of final pooling orders.



#### **Business Overview**

#### 5-year, 20+ well development drilling program

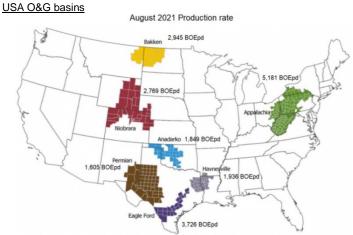
The Anadarko Basin is one of the few "super basins" in the world and a major contributor to US O&G production for over 60 years. The basin stretches over 50,000 square miles from the western part of Oklahoma into Colorado and Kansas with <a href="https://www.nugeundiscovered">huge undiscovered resources estimated at 16 billion barrels of oil, above 200 trillion cubic feet of natural gas, and thousands of horizontal wells yet to be drilled.

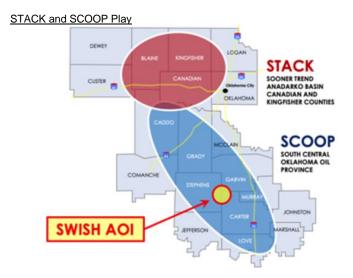
The 2 popular O&G plays within the Anadarko Basin in the recent decade are the STACK - Sooner Trend (oil field), Anadarko Basin (basin), Canadian and Kingfisher (counties) - and SCOOP (South Central Oklahoma Oil Province) Plays. The increased level of activity in the STACK and SCOOP plays are fuelled by the better economics through i) ~70% higher initial production rate from horizontal drilling and completion techniques, ii) low water/oil ratio of less than 3, and iii) the naturally formed rich source rock containing a significant amount of hydrocarbons (Woodford Shale) and the Mississippian rock (Sycamore) formation above it. Tier-1 operators in this area include Continental Resources (NYSE:CLR | MCap 14.7B), Devon Energy Corp (NYSE:DVN | MCap 19.6B), Marathon Oil Corporation (NYSE:MRO | MCap 9.5B), and more.

In November 2020, BRK announced a Prospective Resource of 11,606,000 net BOE (3.8M Bbl + 46.6M Mcf) from its 3 DSUs – Jewell, Rangers, and Flames – within the SWISH AOI which kickstarted its 5-year, 20+ well program. Jewell 13-12-SXH1 (Jewell Well) from the Jewell DSU is the 1st well to be commissioned and started production, on 14 Sep 2021, under the program. Jewell well is developed through a farm-out agreement (up to 50% available working interest) with Stonehorse Energy (ASX:SHE). The well is modelled to have an initial production rate of about 1,300 BOEPD and 1st-year production of 324Mboe which is conservative when compared to its nearby wells – Flash (1,978 BOEPD, 500Mboe in 15months) and Courbet (1,621 BOEPD, 340Mboe in 12 months).

On 13 Oct 2021, BRK announced Jewell Well flow rates of 1,727 BOEPD, exceeding both its base case estimation of 1,300 BOEPD and high side estimate of 1,500 BOEPD, and still rising. Liquids production includes oil (US\$78/BOE) and natural gas liquids (US\$54/BOE), which fetch a higher price than gas (US\$34/BOE), recorded 1,413 barrels per day or 82% of production which also surpasses a key milestone and the previous estimate of 62%.

The Company is advancing on drilling its 2<sup>nd</sup> well in the Ranger DSU with a drilling rig (Kenai Rig 18) and contractor (Kenai Drilling) secured early September 2021. BRK is on track to construct and complete, on average, 1 well per quarter over the next 5 years.





#### BRK's 3 DSUs with its nearby wells



Note: Flash well and Courbet well are owned by BRK but for reference purposes.



#### Orion Project JV

In June 2020, BRK set up a joint venture (Orion Project) with Stonehorse Energy (ASX:SHE) with the aim to acquire producing, cash flow generative, O&G assets within the Anadarko basin and unlock additional value through low-cost, low-risk workovers. This initiative was spurred by BRK's contrarian view on the speculative crash in O&G prices to a 10-year low (about US\$26/barrel of oil and about US\$1.50/MMBtu of natural gas) which played out well as O&G prices climb in 2021 (US\$78/bbl and US\$5.90/MMBtu). Within 6 months, 3 acquisitions were made through Orion Project with workover completed and production rates increasing by 5x - 8x.

#### Non-Operated Assets

During 1Q2021, BRK acquired 100% of the available working interest in 11 of its 37 wells and their associated proved developed producing (PDP) reserves for a consideration of about US\$2M, all paid in shares, or about US\$8.30/BOE, almost a 90% discount to current oil prices. Following the completion of the acquisition in April 2021, BRK net daily production increased to about 110 BOEPD.

#### Real Estate Development strategy

BRK acquires non-developed prospective acreage in the Anadarko Basin and adds value to it by consolidating leases and proving up O&G reserves. The Company then either chose to sell the revalued acreage or maintain a producing interest. In May 2018, BRK sold a parcel of its acreage at US\$28.6K/acre, a 10.4x increase to its average purchased price in less than 2 years. A 2nd transaction was done in July 2018 with a sale price of US\$15.3K/acre or a 68% return over 2.5 years.

As of July 2021, the Company has net working interests in 3,400 acres and 37 wells within the SCOOP and STACK Plays of Anadarko Basin seen in table 1 of page 2.

The 11 wells in STACK Play acquired by BRK

Well Name	Working Interest	Operator
DAVIS 1-8-1611MH	1.17%	Triumph Energy, LLC
DR NO 1-17-20 1611MHX	3.79%	Triumph Energy, LLC
HERRING 1-33 1513MH	18.18%	Triumph Energy, LLC
KEVIN FIU 1-20-17XH	2.02%	Continental Resources, Inc.
LADYBUG 27 22-15N-13W 1HX	2.15%	Devon Energy Corp.
LANDRETH BIA 1-14H	2.40%	Marathon Oil Co.
MIKE COM 1H-0706X	0.38%	Cimarex Energy, Co.
MOTE 1-26-23UWH	3.20%	Rimrock Resource Operating, LLC
ROSER 1611 1-3-34MXH	3.73%	Marathon Oil Co.
SPHINX 26 23-16N-11W-1XH	2.89%	Devon Energy Corp.
STRACK 1-2-11XH	1.02%	Marathon Oil Co.

#### **Investment Thesis**

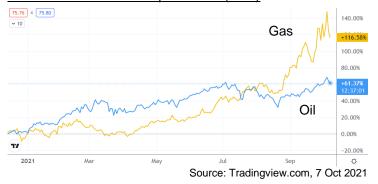
Rising oil & gas prices on supply woes. The fall in O&G demand and prices (real and anticipated) in 2020 has resulted in a fall in global production levels and new investment. As the transportation sector progressively recovers in 2021, oil supply remains at a deficit to keep prices high while CAPEX has yet to revert to pre-COVID-19 levels. The recent hurricane Ida that struck the US Gulf Coast further crippled oil supplies as about 94% (1.7 million BOPD) of its oil production are affected and about 30% are struggling to get back online. The US Gulf is estimated to produce 1.8 million BOPD or about 16% of US oil production in 2021. Concerns over a widening supply deficit in 4Q 2021 have driven oil prices (WTI) up about 16% to US\$78/barrel and even seen China and US tapping into national oil reserves to ease the situation. Analysts are expecting oil prices to hit US\$100/barrel in Q4 2021 and settle in the range of US\$65 – US\$70 per barrel in 2022.

Natural gas has its own domestic market prices but overall has outperformed most commodities in 2021, rising about 128% to US\$5.90/MMBtu in the US and 5x or more to above US\$20/MMBtu in Europe and Asia. The spike in prices is mainly due to a lower natural gas supply from Russia to Europe, disruptions to US gas pipelines, a low inventory, and an anticipated spike in demand for the upcoming winter. Unlike oil where the bulk of it (35%) is used in the transportation sector, natural gas is widely (>90%) used for heating and electricity generation. Therefore, the demand for natural gas (-2.3% YoY) is more robust compared to oil (-9.3% YoY) during the pandemic. However, natural gas is usually found together with oil and is more costly to transport thus, the natural gas supply shortage is more alarming as global production lags.

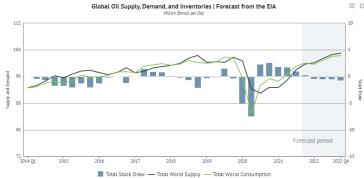
The US government is forecasting an average natural gas price of <u>US\$4.69/MMBtu in 2021</u> which means prices would need to average at US\$8.73/MMBtu for 4Q2021. This is also in line with Goldman Sachs' forecast of US\$10/MMBtu should there be a colder than average winter this year.

5-year, 20+ well drilling program just in time to leverage on rising oil prices environment. The timing cannot be any better for BRK as it commissioned its first operated well in the SWISH AOI, the Jewell Well, in Sep 2021 and capitalised on the high O&G prices. The Company continues to develop its 2<sup>nd</sup> well in its Ranger DSUs, aiming to commission about 1 well per quarter as part of its 5-year, 20-plus well drilling program. Higher than estimated initial production rates and liquids ratio from Jewell well provided a strong start to the program and likely result in an earnings surprise for FY2021 given current O&G prices.

#### WTI and US Natural Gas price chart (YTD)

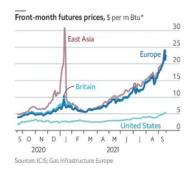


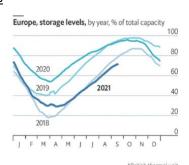
#### Oil supply and demand: Depleting inventories



Source: Knoema, Sep 2021

#### International natural gas prices





Source: The Economist, Sep 2021

22,0 0,985 223,44 0,567

Time to play catch up with O&G prices. The recent surge in O&G prices (Oil: +22.2%, Gas: +44.4%) has seen many other US O&G producers' share price (avg. +45%) to follow suit. On the other hand, BRK share price suffered a 11.1% decline during the same period. We felt that the market has chased larger and known names and has overlooked that BRK is now a full-fledged O&G producer. We expect this gap (63% upside) to close in no time once that market come to the realisation.

The Anadarko basin is fully equipped and has many untapped opportunities. The SCOOP and STACK Plays of the Anadarko basin are some of the most sought after oil drilling locations in US over the past decade with O&G production more than doubled to a peak of 1.9M BOEPD in September 2019. The region's high IP rates and competitive break-even cost (US\$29 - US\$43/barrel) has attracted many tier-1 oil operators allowing BRK to leverage on the well-established infrastructure and skilled labour to achieve low-cost O&G production. According to the US Energy Information Administration (EIA), the basin is still in its early stages of development and sees potential for another few thousand horizontal wells to be drilled.

High cash margin and short payback period from its high IP rates and low break-even cost. Production costs (less D&A) within Anadarko Basin are below US\$10/BOE with high IP rates, this suggests most of the value of the well will be extracted in the first 5 years at a healthy cash margin north of 60% given the recent O&G prices. We can expect a relatively fast payback period of about 12-14 months for each well under the 5-year, 20+ well program assuming similar production rates of the nearby wells, CAPEX of US\$8M, and average prices of US\$70/bbl of oil (WTI) and US\$5/MMBtu of gas. For instance, Jewell Well was expecting a payback period of 14 months with a rate of return (ROR) of 82% using an estimated 1st year production of 324,000 BOE and oil prices in its mid-US\$60 levels. But we can expect a much faster payback and ROR now given the higher-than-estimated IP rates and higher O&G prices.

#### BRK share price vs Peers vs O&G prices



Source: Tradingview.com, 7 Oct 2021

**Great news flow.** BRK has been putting up announcements almost every week updating the market on their development progress. We believe the transparency and frequent status updates build confidence for investors (especially those who have no chance of visiting the site in Oklahoma) and allow us to better access the management team by measuring the timeline of deliverables promised by them. We can expect news flow on Ranger DSU well drilling and planned activities for the 3rd well in the next 6 months.

BRK's real estate strategy allows them to capitalise on favourable oil prices environment while managing risks in opposite trend. BRK's strong board of individuals with decade(s) of experience in the resources and energy sector provide a keen eye in identifying prospective yet undervalued O&G reservoirs to acquire, add value, and resell at a higher value. Their rich experience also enables them to time the cyclical nature of the O&G industry to trade the assets. A few examples include the 10.4x ROI on acreage purchased during the 2016 oil crisis and the active purchases (including through Orion Project) during 2020 when oil prices are low.

### 22,0 3453,978 0,567

#### **Key Risk**

O&G prices may not be sustainable at current prices. OPEC, the largest oil producer (cartel), is known to be able to set oil prices by adjusting their output. Despite the rally in oil prices in the past year, prices are at lower highs and making lower lows since the 2008 high of US\$147.27/bbl (WTI). Lower cost of production due to technology advancement, better economics from alternative energy, and the shift to ESG are few reasons for oil prices to resume this longer-term downtrend. Potential reasons for a further decline in oil prices would be the decline in oil demand as countries work towards their carbon neutrality goals. The rapid adoption of electric vehicles (EV) for instance may displace 1.5M BOPD by 2025 and about 35% of current oil demand if all modes of transportation go green. Moreover, high oil prices would accelerate EV adoption when the cost of ownership is considered. The potential for OPEC to increase production to secure market share may weigh down on oil price as well.

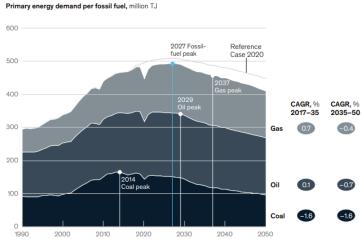
Although natural gas is a cleaner source of energy than oil and is likely to see its demand peaked a decade after oil's, it still faced challenges from renewable energy such as solar and wind energy. Furthermore, natural gas prices will be kept in check by oil and coal prices (**substitution risk**) as energy producers tend to prioritize earnings, with no government interventions. With that said, the Anadarko basin is natural gas-rich with a gas/oil ratio (GOR) of about 15:1 which allows BRK's assets to stay relevant for a much longer duration.

**Delays in the 5-year, 20+ well drilling program schedule** may have a negative impact on the project's net present value (NPV) unless O&G price further increases over the mid-term.

**Funding risk.** Given the CAPEX assumption of US\$8M per well and the timeline of 1 well per quarter under its 5-year, 20+ well program, BRK may need to seek another round of funding to develop its 3<sup>rd</sup> well. A failure to secure funding on time would lead to delays in the overall timeline and affect the project NPV as mentioned above. However, we do note that this risk may be mitigated through seeking a partner to codevelop the wells, similar to what they did with Jewell well. This risk is further reduced going forward as daily production increased with more cashflow generative wells coming online. Additionally, this risk could be significantly reduced with the proceeds of \$18.25m from the exercise of options which are currently in the money.

**Actual vs expectations.** The actual O&G recoverable and production rates may be much lower than pre-production estimates which will result in a longer payback period and lower project NPV. This also applies to the acquisition of producing assets as well as its land investment under its real estate development strategy.

#### Longer term outlook for fossil fuel demand



Source: McKinsey Energy Insights Global Energy Perspective 2021, Dec 2020

BRK runs the risk of its partners' negligence of duty. The company works closely with multiple partners for most of its assets which ties their success to its partners' ability to fulfil their duties. Any partner that fails to perform their duties (financially or operationally) or decides to pull out of the partnership would have a material impact on BRK's business.

Large amount of options may put pressure on the share price. As of 5 Oct 2021, BRK has about 1.66B, or c.50% of its outstanding shares, of outstanding options with an exercise price of A\$0.011 and expiry of 30 Jun 2022. The exercise price is at an attractive 54.2% discount to its current price. Options holders may find it tempting to sell off the mother shares and exercise their options to balance their exposure on a single stock while taking some profits.

Political or regulatory risks are major risks for any company especially so if operations and stakeholders are overseas. BRK is susceptible to changes in US regulations and trade agreements internationally. The US president, Joe Biden, strongly supports the reduction of carbon emission and establishing stricter targets under the Paris climate agreement which may jeopardize leasing and well development plans in the future.

**Foreign exchange (FX) risk** mainly from AUDUSD pairing may negatively affect profits or potential future dividends received. BRK operations and sales are denominated in USD while the company reports in AUD as such, a stronger AUD/USD will have a negative effect on reported earnings.





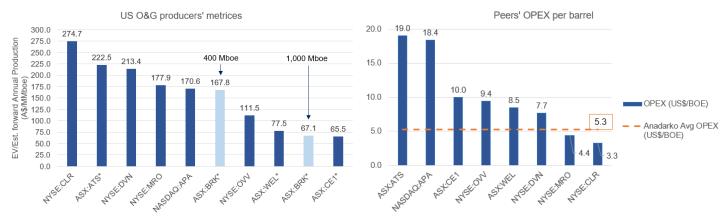
#### **Industry Peers**

The graphs below compare a few of BRK's US-listed peers operating within the Anadarko Basin and ASX-listed peers with operations in the US. Most US-listed peers are large and well-established companies with operations in other basins within USA. We noticed the average oil and gas production cost within USA ranges from US\$1.06/BOE (Continental Resources' Anadarko assets) to US\$8.46/BOE (Winchester's assets within the Permian basin) which provide an indication that BRK's production cost would fall within this range as well.

We prefer comparing BRK and its peers from an EV/Estimated Annual Production angle as the denominator provides partial insights to future revenue expectations. We noticed that BRK would be in the lower half of the pack assuming a 12mth forward annual production of 400Mboe and among the last few assuming annual production of 1MMboe. This estimated production range of 400K to 1MMboe over the next 2 years is comfortable given the schedule of 1 well per quarter and Jewell well's estimated 1st year production of 324Mboe.

Among the ASX-listed peers, we find Calima Energy (ASX:CE1) and Winchester Energy (ASX:WEL) to be close competitors with an aggressive ramp-up in production in the coming year. Calima is advancing its drilling program within Brooks and Thorsby in Canada and guides an average production of 5Mboepd (+35% from current production) for 2022. On the other hand, Winchester recently commissioned its White Hat 2016 well in the East Permain Basin which almost quadrupled its production rate to 482 BOEPD. The other ASX-listed peers are either stagnant on output or still in the exploration stage. We believe BRK has the advantage of being at the lower end of the cost curve, no debt, and has a clear pipeline of wells to be commissioned over the next 5-years. Furthermore, BRK is unhedged at the moment allowing them to have full exposure to the upside of the increasing O&G prices.

#### BRK peer comparison charts



Note: (Only the US peers) Annual production figures are the midpoint of FY2021 Guidance provided by individual companies.

\*In-house estimate annual production for CY2022.

Source: Respective company's announcement, 7 Oct 2021





#### **NPV** model

Using BRK's base case estimation on Jewell Well's production curve and replicating it for another 20 wells (simple assumption) under the 5 years 20+ wells program and over a 20-year period, we derive an NPV $_8$  of US\$210.2M (A\$288.9M) or some 2.84x the current diluted market capitalisation of A\$101.7M.

Year	1	2	3	4	5	6	7	8	9	10	15	20
Date	Sep-22	Sep-23	Sep-24	Sep-25	Sep-26	Sep-27	Sep-28	Sep-29	Sep-30	Sep-31	Sep-36	Sep-41
Drill Rig count	4	4	4	4	4	1						
net BOEPD	1470	3444	4834	5944	6870	6540	5128	4304	3717	3269	2003	1411
net BOEPA	536,599	1,256,899	1,764,479	2,169,379	2,507,577	2,386,937	1,871,651	1,571,005	1,356,718	1,193,065	731,173	515,187
Avg Gas Price (US\$/Mcf)	5.08	4.15	3.94	3.73	3.63	3.63	3.63	3.63	3.63	3.63	3.63	3.63
Transportation cost (US\$/Mcf)	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
Avg Oil Price (US\$/bbl)	73	61	55	50	50	45	45	45	45	45	45	45
Transportation cost (US\$/bbl)	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5
Gas-Oil production ratio	7.32	9.62	11.34	12.69	13.79	20.84	26.31	30.02	32.76	34.85	40.49	42.69
net Revenue	26,154,403	49,968,462	61,775,089	68,487,622	76,642,797	66,416,152	49,397,273	40,545,759	34,563,483	30,135,865	18,128,043	12,697,360
Avg Price (US\$/BOE)	48.74	39.76	35.01	31.57	30.56	27.82	26.39	25.81	25.48	25.26	24.79	24.65
Severance tax	-1,307,720	-2,498,423	-3,088,754	-3,424,381	-3,832,140	-3,471,062	-2,772,353	-2,430,647	-2,203,973	-2,036,609	-1,268,963	-888,815
OPEX	-1,238,095	-3,219,048	-5,200,000	-7,180,952	-9,161,905	-8,941,400	-6,510,572	-5,350,601	-4,661,636	-4,232,726	-4,064,280	-4,064,280
Corporate expenses	-2,000,000	-2,600,000	-3,700,000	-4,600,000	-5,200,000	-5,000,000	-3,800,000	-3,300,000	-3,000,000	-2,400,000	-2,400,000	-2,400,000
Operating Cash flow	21,608,587	41,650,991	49,786,335	53,282,289	58,448,753	49,003,690	36,314,348	29,464,511	24,697,874	21,466,531	10,394,800	5,344,264
CAPEX	-25,600,000	-25,600,000	-25,600,000	-25,600,000	-25,600,000	0	0	0	0	0	0	0
Proceeds from exercised optic	13,276,937	0	0	0	0	0	0	0	0	0	0	0
Cash Flow annual	9,285,524	16,050,991	24,186,335	27,682,289	32,848,753	49,003,690	36,314,348	29,464,511	24,697,874	21,466,531	10,394,800	5,344,264

NPV (US\$)	\$210,173,355
NPV (A\$)	\$288,898,083
Discount rate	8%
AUDUSD	0.7275
MCap (A\$M)	83.5
Share Price	0.025
Outstanding options amount	18.3
Diluted MCap (A\$m)	101.7
Upside	184.0%

Our simple NPV model assumes a well is commissioned every 3 months with CAPEX of US\$8M per well, shared by working interest holders. We also did not factor in the 32.8% higher-than-expected initial production rates of Jewell Well (1,727 BOEPD and still climbing) announced on 13 Oct 2021 to account for possible delays in commissioning of future wells given the uncertainty of COVID-19 and mother nature. Referencing to its nearby wells, the initial production rate could peak as high as 2,377 BOEPD (Park Place 1-21-16MXH, 10 miles northwest of Jewell Well) or 82.8% higher than the base case of 1,300 BOEPD. We believe using Jewell well's base case estimated IP rates as a benchmark for future wells results will help to smooth out the uncertainty of actual production as it is at the 50th percentile of the 16 nearby wells surrounding the 3 DSUs. With that said, future IP rates above 1,300 BOEPD can be seen as further upside to our NPV while the opposite holds true.

Do note that our NPV model solely evaluates the 5-year, 20+ well program and does not consider the existing working interest in producing property generating about 110 BOEPD and the Land and Leasing opportunities which were valued at A\$22.9M by Pitt Street Research in Dec 2020.





#### **Appendix**

Management team and the Board

#### Michael Fry, Chairman

Michael Fry holds a Bachelor of Commerce degree from the University of Western Australia, is a Fellow of the Financial Services Institute of Australasia, and is a past member of the Australian Stock Exchange. Michael has extensive corporate and commercial experience, financial and capital market knowledge and a background in corporate treasury management. Michael is currently non-executive chairman of Technology Metals Australia Limited (ASX:TMT) and Challenger Energy Limited (ASX:CEL).

#### David Prentice, Managing Director

David Prentice has more than 25 years' experience in commercial management and business development within the natural resources sector, working for some of Australia's leading resource companies. This has included high-level commercial and operational roles with a number of publicly listed and unlisted resource companies. The last 10 years have seen David gather extensive experience (both corporate and operational) in the US on-shore oil and gas exploration and production sector with a particular focus on the mid-continent region.

#### Richard Homsany, Non-Executive Director

Richard Homsany is an experienced corporate lawyer and Certified Practising Accountant (CPA) with significant experience in the resources and energy sectors. He was a partner of major law firm DLA Phillips Fox (now known as global law firm DLA Piper) and sits on the board of many resource companies. This includes the Executive Chairman of Toro Energy Limited (ASX:TOE), Executive Vice President, Australia Mega Uranium Ltd (TSX:MGA), Chairman of Redstone Resources Limited (ASX:RDS), and Chairman of Central Iron Ore Limited (TSX-V:CIO). He is also the principal of Cardinals Lawyers and Consultants, and Chairman of the Health Insurance Fund of Australia Ltd (HIF).

#### Dr. Gracjan Lambert, Executive General Manager Commercial

Gracjan Lambert has a wealth of technical and commercial experience in the global oil and gas industry, built over more than 23 years working in Europe, Asia (including the Middle East), Australia, North and South America, and Africa. He spent 10 years at Exxon Mobil (NYSE:XOM) in diverse roles including managing global held operations and leading complex international commercial negotiations. Over the course of his career, Mr Lambert has leveraged his proven commercial track record and technical expertise to inform profitable decision making and leadership. He holds a PhD in Exploration Geophysics from Curtin University in Western Australia.

#### Katherine Garvey, Company Secretary

Katherine is a corporate lawyer with significant experience in the resources sector. Katherine advises companies on a variety of corporate and commercial matters including capital raisings, finance, acquisitions and disposals, Corporations Act and ASX Listing Rule compliance, corporate governance and company secretarial issues and has extensive experience drafting and negotiating various corporate and commercial agreements. Katherine is presently Legal Counsel and Company Secretary to Toro Energy Limited (ASX:TOE), Legal Counsel (Australia) to Central Iron Ore Ltd (TSX-V:CIO), a senior associate at Cardinals Lawyers and Consultants, and Company Secretary to the Health Insurance Fund of Australia Limited.



### Financial Statements (Source: BRK's annual report and half yearly report)

### Income Statement

Income Statement (A\$)	FY2019	FY2020	1H FY2021
	31-Dec-19	31-Dec-20	30-Jun-21
Royalty Revenue	2,187,313	365,881	440,295
Production expense	(459,427)	(158,939)	(108,621)
Gross Profit	1,727,886	206,942	331,674
Interest revenue	102	514	1,743
Govt grant and subsidies			165,888
Gain on sale of asset	1,076,763	0	
FV gain on equity investment			82,500
Other income	0	191,266	550,298
Other expenses	(228,941)	(544,167)	(243,667)
Director and employee related expenses	(260,000)	(803,825)	(370,858)
Consultants' fees	(19,535)	(58,509)	(94,656)
Compliance and registry expenses	(257,343)	(221,944)	(212,211)
Travel expense			(60,917)
Share based payment expense	(52,800)	(197,391)	(1,687,000)
Interest on financing	(602,160)	(681,052)	(271,011)
Promotion and communication cost			(100,241)
Amortisation expense	(353,255)	(91,298)	(212,150)
Fair value gain/(loss) on financial assets	(97,500)	45,000	0
Loss on disposal of assets	0	(321,359)	0
Write down of receivables	0	(455,062)	0
Gain/(loss) on FX movements	(15,714)	494,313	0
Profit/(loss) before income tax expense	917,503	(2,436,572)	(2,120,608)
Income tax expense	0	0	0
Net profit/(loss) for the year	917,503	(2,436,572)	(2,120,608)
Basic and Diluted earnings/(loss) per share	0.09	(0.22)	(0.10)





### Balance Sheet

Balance Sheet (A\$)	FY2019	FY2020	1H FY2021	
	31-Dec-19	31-Dec-20	30-Jun-21	
Current Assets				
Cash and CE	1,056,179	1,302,364	8,597,506	
Trade and other receivables	466,684	51,825	90,967	
Total Current Assets	1,522,863	1,354,189	8,688,473	
Non-current Assets				
Other assets	1,336,964	0	0	
PPE	0	19,482	605	
Exploration and evaluation assets	10,832,623	10,928,991	14,284,066	
Production assets	575,962	774,014	3,263,362	
Financial assets	52,500	97,500	180,000	
Total Non-current Assets	12,798,049	11,819,987	17,728,033	
Total Assets	14,320,912	13,174,176	26,416,506	
Current Liabilities				
Trade and other payables	47,617	200,347	1,386,047	
Borrowings	5,362,785	5,192,635	3,950,165	
Total Current Liabilities	5,410,402	5,392,982	5,336,212	
Non-current Liabilities				
Borrowings	0	166,191	144,719	
Provisions	0	64,918	66,504	
Total Non-current Liabilities	0	231,109	211,223	
Total Liabilities	5,410,402	5,624,091	5,547,435	
Net Assets	8,910,510	7,550,085	20,869,071	
Equity				
Issued Capital	225,407,357	227,091,611	240,084,215	
Reserves	3,803,585	282,633	2,729,623	
Accumulated losses	(220,300,432)	(219,824,159)	(221,944,767)	
Total Equity	8,910,510	7,550,085	20,869,071	



### **Cashflow Statement**

Cashflow Statement (A\$)	FY2019	FY2020	1H FY2021		
	31-Dec-19	31-Dec-20	30-Jun-21		
Cash flows used in Operating activities					
Receipts from customers	1,735,348	557,147	951,451		
Payments to suppliers and employees	(1,244,252)	(1,569,740)	(756,476)		
Interest received	93	514	1,743		
Net cash from Operating activities	491,189	(1,012,079)	196,718		
Cook flows from Investing activities					
Cash flows from Investing activities	2.072.540	242.200	0		
Proceeds from disposal of assets	3,072,518	343,286	0		
Proceeds from exploration project participant	0	(000 447)	812,263		
Payments for exploration activities	(4.007.407)	(239,447)	(3,096,771)		
Payments for leasehold acquisitions	(1,927,127)	(567,390)	(05.504)		
Payments for production assets	(1,381,027)	(329,467)	(85,581)		
Payments for assets	(512,460)	(722.212)	(2.272.222)		
Net cash used in Investing activities	(748,096)	(793,018)	(2,370,089)		
Cash flows from Financing activities					
Proceeds from issuance of shares	0	1,387,500	8,250,000		
Proceeds from issuance of options	9,981	300,000	2,958,104		
Payments of share issuance	0	(77,137)	(495,000)		
Payments of option issuance	0	(32,461)	0		
Cash from obtaining control of subsidiaries	0	372,347	0		
Proceeds from borrowings	200,000	166,191	144,719		
Repayment of borrowings	(100,000)	0	(1,365,000)		
Net cash from Financing activities	109,981	2,116,440	9,492,823		
Net increase/(decrease) in Cash and CE	(146,926)	311,343	7,319,452		
Beginning Cash	1,193,306	1,056,179	1,302,364		
Effects of FX	9,799	(65,158)	(24,310)		
Ending Cash	1,056,179	1,302,364	8,597,506		

3453,978





#### Disclosure of Interests:

Brookside Energy Limited currently are, or in the past 12 months have been, a client of Spark Plus Pte Ltd. During this period, Spark Plus Pte Ltd provided corporate advisory services. In the past 12 months, Spark Plus Pte Ltd have received compensation for corporate advisory services from the Company. Spark Plus Pte Ltd intends to seek or expects to receive compensation for corporate advisory services from the Company in the next three months.

Spark Plus directors, consultants and advisers currently hold less than 1% of issued shares in Brookside Energy Limited and may buy or sell the shares from time to time.

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