



Empire Energy Group Limited

1Q20 actions sustain prospects well beyond CV

Empire Energy Group Limited (ASX:EEG) is a junior oil and gas producer and explorer with onshore oil & gas shale assets. EEG holds the largest acreage position (>14.5m acres) in the highly prospective, potentially global-scale NT McArthur-Beetaloo basins. The province is fast developing as a gas-rich (and potentially liquids-rich) boost to future east coast Australia's energy needs and Darwin's expanding LNG export terminals, amid strong policy support from both the Northern Territory (NT) and Federal governments. The Beetaloo Basin alone is considered to contain recoverable shale dry gas volumes of over 100 Tcf, with liquids upside. EEG also owns conventional gas/oil assets in the US Appalachia, 80%-hedged at US\$2.50/mcf for 2020. In March, EEG received approval to drill its Carpentaria-1 vertical appraisal well into the Kyalla and Velkerri shale targets, to confirm recent better-than-expected seismic mapping results. Crystallising EEG's longer-term potential rests on successful drilling, then securing strategic funding and infrastructure support to commercialise the acreage. Given exceptional COVID-19 uncertainties, EEG has acted decisively to secure US debt covenant waivers until year-end, while conserving cash (A\$11.25m gross) and protecting staff and local communities, by deferring drilling until a safe-work plan can be finalised with local authorities.

Business model

Empire Energy Group (EEG) is a junior oil & gas producer/exploration company, focused on maturing its portfolio of onshore, long-life oil and gas fields. The company holds substantial exploration acreage in Australia's Northern Territory McArthur-Beetaloo basin and is the 2nd largest gas producer in the US Appalachia NY State. EEG's NT assets are at an early exploration stage. Given the region's high prospectivity, success from future drill programs could see cashflows within 36-48 months, assuming links and upgrades to existing pipeline infrastructure are delivered in parallel. COVID-19 delays, rather than dents, the Opportunity.

1Q20 quarterly takeaways well set for future

EEG's 1Q20 quarterly updated in line with our expectations. Gross positive cash of ~A\$11.25m leaves EEG funded to support its 2020 EP187 Carpentaria-1 work program appraisal aims in line with its strategic pivot towards the McArthur-Beetaloo. While risks exist switching from producer to explorer/appraiser, we believe the quality of assets justifies the decision. EEG's Appalachia business is running lean, 80%-hedged at US\$2.50/mcf & with debt covenant waivers until year-end. We chiefly await a) NT drilling commencement (COVID-19 safe-work clearance & a rig supply contract); b) an upgraded McArthur-Beetaloo resource statement; c) NT EMP submission for the Carpentaria-1 vertical frac; d) gaining regional land access clearance. Robust results from EEG's 20/21 programs could evolve its 2015 prospective resource (P50) of 1.85bln Boe (11 Tcfe) into a contingent resource (2C), better positioning the company to attract strong potential funding partners. Positive readthroughs from Beetaloo neighbour (eg Origin & Santos) are also likely to inject value.

Valuation

We assign a base case valuation of \$133m or \$0.51/share using the RaaS 2Q20 commodity price deck, on the current share count of 263.3m. EEG has a number of event drivers over the next 6-12 months which in our view hold potential to generate a sizeable uplift in NAV.

Historical earnings and RaaS Advisory estimates									
Year end	Revenue (US\$m)	Gross Profit (US\$m)	NPAT reported (US\$m)	OCFPS (AUD cps)	EPS Adj (AUD cps)	Price/Book (x)			
12/18a	6.6*	1.9*	(5.3)*	(0.15)	(1.41)	19.4			
12/19e	5.4	1.2	(12.0)	(4.12)	(9.29)	3.2			
12/20e	4.7	1.4	(3.3)	1.32	(1.95)	5.4			
12/21e	4.4	1.1	(3.7)	2.82	(2.22)	9.2			

Source: Company data, RaaS estimates for FY19e, FY20e and FY21e *restated for asset sale

Energy exploration & production

7 May 2020



Share performance (12 months)



Upside Case

- EEG's Carpentaria-1 drill program proves the Beetaloo Velkerri/Kyalla shales extend into EP187 & hold both gas & liquids
- Further McArthur-Beetaloo work programs generate significant commercial outcomes
- EEG drilling success generates high-value
 LT strategic partnership(s) & funding options

Downside Case

- McArthur-Beetaloo EP 187 drilling proves unsuccessful, negatively impacting remaining NT permits (EP180-188) values
- Continuing equity issue financing is highly dilutive to future share capital growth
- Fracking success in NT/Qld pushes onshore energy prices to sub-economic levels.

Board of Directors

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Paul Espie AO Non-Executive Chairman
John Gerahty Non-Executive Director
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Empire Energy Group Limited – 1Q20 activities target "new normal"

EEG reported its March 2020 quarter update, as the company continues its strategic investment pivot away from US conventional gas and oil production towards exploring the gas and liquids potential of its huge 14.5m acre tenement position in the Northern Territory's highly prospective McArthur- Beetaloo basin.

With the largest acreage held by any company in the region and as the only independent ASX-listed junior explorer in the region, EEG announced "better-than-expected" 2D seismic results in late-January, highlighting the promise that the Beetaloo sub-basin's identified hydrocarbon-prospective shale sequences extend into the company's EP 187 tenement holding. The company also concluded the first quarter with "A\$11.2m gross positive cash on hand, in line with our expectations and currently is adequately funded to complete EEG's forward 12-month work program.

The company has deferred the drilling of Carpentaria-1 in EP187, its key near-term value driver, until the board and management can be confident that the first stage vertical appraisal program can be conducted in a "new normal" healthy, safe, responsible and cost-effective manner for all staff, contractors and local communities, in conjunction with government authorities and other key stakeholders.

EEG continues to focus on making progress on a number of fronts:

- a) The company has obtained an agreement with its US bankers to waive all debt covenants until yearend, allowing breathing space for US Henry Hub gas prices to recover, while providing investors with reasonable comfort that its US production assets can be self-sustaining for the remainder of 2020. EEG's 2020 Appalachian gas output is 80%-hedged at US\$2.50/mmBtu.
- b) The company has engaged Netherland Sewell & Associates to prepare an **updated independent prospective resource** report covering all its tenement holdings in the Northern Territory. We anticipate the results will be released this quarter. EEG's existing P50 Prospective Resource calculates ~11Tcfe (~13k PJ) across its McArthur basin holdings, covering 5.5m/14.5m acres. This was last updated in February 2016.
- c) The company is drafting the **Environmental Management Plan** for the next phase of its Carpentaria-1 well work program. Baseline environmental testing is ongoing.
- d) The company is also prioritising negotiations with **local landowners** to gain regional land access clearance on its remaining Northern Territory permits, including EP180, 181, 182, 183 and 188.
- **e)** EEG has been cleared to continue operating its New York State and Pennsylvania Appalachia conventional energy assets during the COVID-19 shutdown. In both states, natural gas for power generation has been deemed an "<u>essential service</u>" by the relevant local authorities.

Financials - looking at March 2020 and beyond

EEG concluded the March 2020 quarter with a positive cash balance of US\$6.9m (A\$11.25m), US\$3m below its 4Q 2019 cash balance of US\$9.9m (A\$14.8m), in line with our expectations.

Exhibit 1: EEG's cash position in A	UD and USD terms	
	AUD (m)	USD (m) *
Gross Cash	11.25	6.94
Debt	10.82	6.675
Net Cash	0.43	0.26
Source: Company data; assumes AUD-US	D exchange rate of 1:0.6169	

Looking ahead, we consider EEG holds adequate cash reserves to fund its 2020 Carpentaria-1 vertical drilling plans in the Beetaloo sub-basin for the upcoming 12-months. We estimate well and appraisal costs are likely to range A\$5-8m, while Australian corporate overheads are running at ~A\$2.5m per annum. We note that our funding forecasts assume a COVID-19 shutdown of 2-3 months and incorporate a small potential upward revision of costs to take account of additional health and safety distancing measures.

Future funding sources

As discussed in previous reports, we believe EEG has a number of future potential funding sources, including:



- a) A Farm-Out partnership
- b) Additional equity raising
- c) An asset sale of EEG's US Appalachian conventional gas/oil assets across Pennsylvania and New York State, where the company is the second-largest regional gas supplier.
- d) The exercise of unlisted options. EEG has ~57.43m unlisted options exercisable at share prices of A\$0.30, \$0.32 and \$0.60 over various periods through until 30 December 2022.

Appalachia cashflows linked to natural gas outlook

EEG's Appalachian production business is running largely at cash flow break even at prevailing gas prices. During the March 2020 quarter, the business generated US\$1.43m revenues, while total staff, production, development, interest and tax costs across Australia and the US amounted to ~US\$1.7m.

During the quarter, total net US Appalachian gas output reached 403,704 Mcf (4,436 Mcf/day), falling nominally by 356 Mcf from the December quarter's production total of 440,851 Mcf (4,792 Mcf/day).

EEG's outstanding US-denominated debt facility with Macquarie Bank totals US\$6.675m and does not mature until September 2024. Interest costs are covered from quarterly Appalachian conventional production cashflows. These debt costs amount to ~US\$0.1375m per quarter.

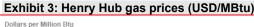
Gas hedging now extends to end-2023, providing additional downside protection for the operations. The hedges have all been set at a floor price of \$2.50/mmBtu, with premia of up to US\$0.41/mmBtu to be paid.

Exhibit 2: EEG US Gas production hedging (2020-2023)

Period	Volume mmbtu/month	Hedge Type	Strike Price US\$/mmbtu	Premium US\$/mmbtu
Apr 20 to Dec 20	120,000	Put Options	\$2.50	\$0.23
Jan 21 to Dec 21	25,000	Put Options	\$2.50	\$0.23
Jan 21 to Dec 21	25,000	Put Options	\$2.50	\$0.37
Jan 21 to Dec 21	25,000	Put Options	\$2.50	\$0.41
Jan 22 to Dec 22	25,000	Put Options	\$2.50	\$0.35
Jan 22 to Dec 22	50,000	Put Options	\$2.50	\$0.41
Jan 23 to Dec 23	25,000	Put Options	\$2.50	\$0.41

Source: Company data

US Gas Outlook





Source: EIA data

After averaging 25-year lows of US\$1.91/mmBtu during the March quarter, we believe the Henry Hub price outlook is set to improve, in line with the forward curve contango averaging US\$2.40/mmBtu for the remainder of 2020. In our view, the principle driver is the significant fall in shale gas produced as a by-product of shale oil. With WTI oil price lows causing many US shale oil producers to plug wells and greatly curtail further drilling plans, by-product gas rates have been falling commensurately since COVID-19 began to restrict economic activity. The EIA estimates that by-product gas accounted for ~50% of total US gas supplies in 2019,



while other gas activities have been scaling back too. According to Baker Hughes data, active gas rigs have fallen to 81, compared to 183 rigs a year ago.

Beetaloo neighbour activities help validate world class hydrocarbon significance

The virus shutdown appears in no way to have dented Origin's enthusiasm for the Beetaloo sub-basin's hydrocarbon potential, as mentioned in previous reports. Demonstrating its ongoing commitment to regional investments, Origin announced the purchase of an additional 7.5% of its JV partnership with Falcon, in early-April, lifting its total stake to 77.5%, for effective consideration of A\$25m.

In addition, Origin agreed to significantly lift the total investment cap on the JV Stage II and Stage III work programs from A\$113.3m to A\$263.8m, an increase of A\$150.5m or 133%.

With this latest deal, Origin is valuing its JV tenements and all completed works to date at a net A\$333m.

Origin is hopeful the Velkerri and Kyalla hydrocarbon plays may be stacked, as well as containing both gas and liquids, both of which would substantially improve project returns. Origin expects to restart its Kyalla work program during 2H 2020, while deferring its Velkerri-76 work program until 2Q next year.

Exhibit 4: Beetaloo sub-basin: planned Regional Hydrocarbon Exploration

Company	Activity Scheduled	Timeline
EEG	EP187 Carpentaria-1 vertical drill program ~2900m (Kyalla & Velkerri shale appraisal)	2H 2020
Origin-Falcon JV	EP 117 Kyalla 117 N2 1H ST2 extended horizontal production flow test continuance - targeting liquids rich gas fairway. 4Q19: announced C3,C4,C5 & elevated gas shows & total Kyalla thickness of 900m	2Н 2020
Origin-Falcon JV	EP76 Velkerri 76 S2 eastern flank drill, HFS, test - targeting shale liquids rich gas (15-60 bbl/MMscf) - awaits NT EMP approval	1H 2021
Santos-Tamboran JV	EP 161 Tanumbirini-1 extended flow test completion 1Q20: gas discovery & maiden resource from "above-expected" flow test results of 1.2mmscf/d	1H 2021
Santos-Tamboran JV	EP161 Inacumba-1 vertical drilling	2H 2021
Santos - Armour Energy	South Nicholson 2D seismic tests	2021
Hancock Prospecting	2D seismic program awaits NT EMP submission (subject to landholder approval)	2021
Pangaea Resources	Activities await NT EMP submission	2021

Source: Company data; NT Department of Primary Industry and Resources

Santos has recently announced a maiden 2C prospective resource of 22mm boe (~130PJ), after making a gas discovery and finding "better-than-expected" flow test rates of >1.2mmscf/day from the vertical hydraulic fracture stimulation of its EP161 Tanumbirini-1 well. All work for 2020 has been deferred until 2021 due to COVID-19.

Santos also looks set to expand its exposure to the Beetaloo. At the end of January 2020, the company was provisionally granted a new (100%-owned) permit, EP354, located on the southern side of existing Beetaloo Basin exploration activities, squeezed to the south of Origin's EP76 permit; to the north of Pangaea's EP 169 permit and to the west of Sweetpea's EP136 permit.



Exhibit 5: Financial Summary

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EMPIRE ENERGY O	SROUP LTD	EEG				NET PRODUCTION			2018	2019	2020E	2021E
YEAR END	SHOOT ETD	Dec				Crude Oil	kb		127	89	3	3
NAV	A\$mn	\$0.51				Nat Gas	mmo	f	1,834	1,778	1,748	1,731
SHARE PRICE	A\$iiiii A\$cps		Last price		6-May	TOTAL	kboe		432	385	294	291
MARKET CAP	A\$cps A\$mn	63	Last price		U-IVIAY	TOTAL	KDUG		432	363	234	231
ORDINARY SHARES	M M	263				Product Revenue	A\$m		14.0	10.3	4.5	4.3
	M											
OPTIONS	IVI	54				Cash Costs	A\$m		(5.1)	(4.4)	(2.4)	(2.4)
						Ave Price Realised	A\$/b		32.49	26.84	15.30	14.60
COMMODITY ASSUM		2018	2019	2020E	2021E	Cash Costs	A\$/b	oe	(11.84)	(11.54)	(8.00)	(8.10
Realised oil price	US\$/b	59.86	59.76	36.90	39.16	Cash Margin			20.65	15.29	7.30	6.50
Realised gas price	US\$/mcf	3.24	2.72	2.49	2.36			_				
Exchange Rate	A\$:US\$	0.7452	0.6958	0.6389	0.6290	RESOURCES and RI	ESERVES	Prospec	tive Resou			
									P90	P50	P10	
						Northern Territory		~~~~~~				
EARNINGS	US\$000s	2018	2019	2020E	2021E	Gas						
Revenue		6,593	5,397	4,656	4,407	Barney Creek Fm	В		3,304	8,699	20,172	
Cost of sales		(4,723)	(4,189)	(3,305)	(3,325)	Velkerri Fm	В	~~~~~~	383	1,192	3,086	
Gross Profit		1,870	1,208	1,352	1,082	Wooogorang Fm	Bo	<u>cf</u>	524	1,185	2,371	
Other revenue						TOTAL			4,211	11,076	25,629	
Other income		2,192	155	200	200							
Exploration written off		0	0	0	0	Oil						
Finance costs		(801)	(637)	135	45	Barney Creek Fm	M		66	174	403	
Impairment		0	(6,512)	0	0	Velkerri Fm	M		8	24	62	
Other expenses		(8,399)	(6,052)	(4,950)	(4,985)	Wooogorang Fm	M	lb	10	24	47	
Profit before tax		(5,138)	(11,838)	(3,263)	(3,658)	TOTAL			84	222	512	
Taxes		(115)	(135)	0	0							
NPAT Reported		(5,254)	(11,973)	(3,263)	(3,658)				1P	2P	3P	
Loss on discontinued op	perations	(10,714)	(4,102)	0	0	US						
NPAT Underlying		(15,968)	(16,075)	(3,263)	(3,658)	Gas	В	cf	24.3	34.4	38.2	
CASHFLOW	US\$000s	2018	2019	2020E	2021E	EQUITY VALUATION						
Operational Cash Flo		2,828	1,267	117	450		Risked Rang				nge Per Shar	
Operational Cash Flo Net Interest						NT	Risked Rang Low	Mid	High	Low	Mid	High
Operational Cash Flo Net Interest Taxes Paid		2,828 (2,974)	1,267 (1,885)	117 135	450 45	NT Gas	Risked Rang Low \$60	Mid \$90	High \$202	Low \$0.23	Mid \$0.34	High \$0.77
Operational Cash Flo Net Interest Taxes Paid Other	ow	2,828 (2,974) (115)	1,267 (1,885) (135)	117 135 (30)	450 45 (30)	NT Gas Oil	Risked Rang Low	Mid	High	Low	Mid	High \$0.77
Operational Cash Flo Net Interest Taxes Paid Other Net Operating Cashf	ow	2,828 (2,974) (115) (261)	1,267 (1,885) (135) (753)	117 135 (30) 222	450 45 (30) 465	NT Gas Oil US Onshore	Risked Rang Low \$60 \$22	Mid \$90 \$33	High \$202 \$74	\$0.23 \$0.08	Mid \$0.34 \$0.13	High \$0.77 \$0.28
Operational Cash Flo Net Interest Taxes Paid Other Net Operating Cashf Exploration	ow	2,828 (2,974) (115) (261)	1,267 (1,885) (135) (753)	117 135 (30) 222 (1,278)	(30) 465 (3,774)	NT Gas Oil	Risked Rang Low \$60 \$22 \$5	Mid \$90 \$33 \$10	High \$202 \$74 \$15	\$0.23 \$0.08 \$0.02	Mid \$0.34 \$0.13 \$0.04	High \$0.77 \$0.28 \$0.06
Operational Cash Flo Net Interest Taxes Paid Other Net Operating Cashf Exploration PP&E	ow	2,828 (2,974) (115) (261) 0 (49)	1,267 (1,885) (135) (753) 0	117 135 (30) 222 (1,278) 0	(30) 465 (3,774) 0	NT Gas Oil US Onshore Appalachian	Risked Rang Low \$60 \$22 \$5 \$87	Mid \$90 \$33 \$10 \$133	######################################	\$0.23 \$0.08	Mid \$0.34 \$0.13	High \$0.77 \$0.28 \$0.06
Operational Cash Flo Net Interest Taxes Paid Other Net Operating Cashf Exploration PP&E Petroleum Assets	ow	2,828 (2,974) (115) (261) 0 (49) (168)	1,267 (1,885) (135) (753) 0 0 (1,848)	117 135 (30) 222 (1,278) 0	(30) 465 (3,774) 0	NT Gas Oil US Onshore Appalachian Net cash/(debt)	Risked Rang Low \$60 \$22 \$5 \$87 \$5	\$90 \$33 \$10 \$133 \$5	\$202 \$74 \$15 \$292 \$5	\$0.23 \$0.08 \$0.02	Mid \$0.34 \$0.13 \$0.04	High \$0.77 \$0.28 \$0.06
Operational Cash Flo Net Interest Taxes Paid Other Net Operating Cashf Exploration PP&E Petroleum Assets Net Asset Sales/other	ow	2,828 (2,974) (115) (261) 0 (49) (168) 359	1,267 (1,885) (135) (753) 0 0 (1,848) 20,008	(30) 222 (1,278) 0 0 (472)	(30) 465 (3,774) 0 (715)	NT Gas Oil US Onshore Appalachian	Risked Rang Low \$60 \$22 \$5 \$87	Mid \$90 \$33 \$10 \$133	######################################	\$0.23 \$0.08 \$0.02	Mid \$0.34 \$0.13 \$0.04	High \$0.77 \$0.28 \$0.06
Operational Cash Flo Net Interest Taxes Paid Other Net Operating Cashf Exploration PP&E Petroleum Assets Net Asset Sales/other Net Investing Cashfl	ow	2,828 (2,974) (115) (261) 0 (49) (168) 359 (120)	1,267 (1,885) (135) (753) 0 0 (1,848) 20,008 17,407	117 135 (30) 222 (1,278) 0 0 (472) (1,528)	450 45 (30) 465 (3,774) 0 0 (715) (4,024)	NT Gas Oil US Onshore Appalachian Net cash/(debt) Corporate costs	Risked Range	\$90 \$33 \$10 \$133 \$5 (\$5)	#ligh \$202 \$74 \$15 \$292 \$5 (\$5)	\$0.23 \$0.08 \$0.02 \$0.33	Mid \$0.34 \$0.13 \$0.04 \$0.51	\$0.77 \$0.28 \$0.06 \$1.11
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Operational Cash Flo Net Interest Taxes Paid Other Net Operating Cashf Exploration PP&E Petroleum Assets Net Asset Sales/other Net Investing Cashfl Dividends Paid Net Debt Drawdown Equity Issues/(Buyback)	flow	2,828 (2,974) (115) (261) 0 (49) (168) 359 (120) 0 (7,878) 11,677	1,267 (1,885) (135) (753) 0 0 (1,848) 20,008 17,407 0 (18,497) 8,037	117 135 (30) 222 (1,278) 0 0 (472) (1,528) 0 (2,148)	(30) 465 (3,774) 0 (715) (4,024) 0 (1,893)	NT Gas Oil US Onshore Appalachian Net cash/(debt) Corporate costs	Risked Range	\$90 \$33 \$10 \$133 \$5 (\$5)	#igh \$202 \$74 \$15 \$292 \$5 (\$5)	\$0.23 \$0.08 \$0.02 \$0.02 \$0.33	Mid \$0.34 \$0.13 \$0.04 \$0.51	\$0.77 \$0.28 \$0.06 \$1.11 \$1.11
Operational Cash Flo Net Interest Taxes Paid Other Net Operating Cashf Exploration PP&E Petroleum Assets Net Asset Sales/other Net Investing Cashfl Dividends Paid Net Debt Drawdown Equity Issues/(Buyback) Other	flow	2,828 (2,974) (115) (261) 0 (49) (168) 359 (120) 0 (7,878) 11,677	1,267 (1,885) (135) (753) 0 0 (1,848) 20,008 17,407 0 (18,497) 8,037 0	117 135 (30) 222 (1,278) 0 0 (472) (1,528) 0 (2,148) 0 0	450 45 (30) 465 (3,774) 0 (715) (4,024) 0 (1,893) 0	NT Gas Oil US Onshore Appalachian Net cash/(debt) Corporate costs TOTAL RATIO ANALYSIS	Risked Rang Low \$60 \$22 \$5 \$87 \$5 (\$5)	\$90 \$33 \$10 \$133 \$5 (\$5)	#ligh \$202 \$74 \$15 \$292 \$5 (\$5) \$292	\$0.23 \$0.08 \$0.02 \$0.02 \$0.33 \$0.33	Mid \$0.34 \$0.13 \$0.04 \$0.51 \$0.51	\$0.28 \$0.28 \$0.06 \$1.11 \$1.11
Operational Cash Flo Net Interest Taxes Paid Other Net Operating Cashf Exploration PP&E Petroleum Assets Net Asset Sales/other Net Investing Cashfl Dividends Paid Net Debt Drawdown Equity Issues/(Buyback) Other Net Financing Cashfl	flow	2,828 (2,974) (115) (261) 0 (49) (168) 359 (120) 0 (7,878) 11,677 0 3,785	1,267 (1,885) (135) (753) 0 0 (1,848) 20,008 17,407 0 (18,497) 8,037 0 (10,693)	117 135 (30) 222 (1,278) 0 0 (472) (1,528) 0 (2,148) 0 (2,148)	(30) (465) (3,774) 0 0 (715) (4,024) 0 (1,893) 0 (1,893)	NT Gas Oil US Onshore Appalachian Net cash/(debt) Corporate costs TOTAL RATIO ANALYSIS Shares Outstanding	Risked Rang Low \$60 \$22 \$5 \$87 \$5 (\$5) \$87	\$90 \$33 \$10 \$133 \$5 (\$5)	#igh \$202 \$74 \$15 \$292 \$5 (\$5) \$292 \$2018 \$2313	\$0.23 \$0.08 \$0.02 \$0.33 \$0.33	Mid \$0.34 \$0.13 \$0.04 \$0.51 \$0.51	#High \$0.77 \$0.28 \$0.00 \$1.11 \$1.11 \$2021E 265
Operational Cash Flo Net Interest Taxes Paid Other Net Operating Cashf Exploration PP&E Petroleum Assets Net Asset Sales/other Net Investing Cashfl Dividends Paid Net Debt Drawdown Equity Issues/(Buyback) Other	flow	2,828 (2,974) (115) (261) 0 (49) (168) 359 (120) 0 (7,878) 11,677	1,267 (1,885) (135) (753) 0 0 (1,848) 20,008 17,407 0 (18,497) 8,037 0	117 135 (30) 222 (1,278) 0 0 (472) (1,528) 0 (2,148) 0 0	450 45 (30) 465 (3,774) 0 (715) (4,024) 0 (1,893) 0	NT Gas Oil US Onshore Appalachian Net cash/(debt) Corporate costs TOTAL RATIO ANALYSIS Shares Outstanding EPS (pre sig items)	Risked Rang Low \$60 \$22 \$5 \$87 \$5 \$87 \$5 \$87 \$5 \$87 \$5 \$87 \$5 \$87 \$6 \$6 \$6 \$6 \$6 \$6 \$6 \$	\$90 \$33 \$10 \$133 \$5 (\$5)	High \$202 \$74 \$15 \$292 \$5 \$(\$5) \$292 \$2018 \$2313 \$(1.05)	\$0.23 \$0.08 \$0.02 \$0.02 \$0.33 \$0.33	Mid \$0.34 \$0.13 \$0.04 \$0.51 \$0.51	\$0.06 \$1.11 \$1.11 2021E 263 (1.39
Operational Cash Flo Net Interest Taxes Paid Other Net Operating Cashf Exploration PP&E Petroleum Assets Net Asset Sales/other Net Investing Cashfl Dividends Paid Net Debt Drawdown Equity Issues/(Buyback) Other Net Financing Cashf Net Change in Cash	flow	2,828 (2,974) (115) (261) 0 (49) (168) 359 (120) 0 (7,878) 11,677 0 3,785 3,404	1,267 (1,885) (135) (753) 0 0 (1,848) 20,008 17,407 0 (18,497) 8,037 0 (10,693) 5,961	117 135 (30) 222 (1,278) 0 0 (472) (1,528) 0 (2,148) 0 (2,148) 0 (2,148) (3,454)	(30) (45) (465) (3,774) 0 (715) (4,024) 0 (1,893) 0 (1,893) (5,452)	NT Gas Oil US Onshore Appalachian Net cash/(debt) Corporate costs TOTAL RATIO ANALYSIS Shares Outstanding EPS (pre sig items) EPS	Risked Rang Low \$60 \$22 \$5 \$87 \$5 \$5 \$87 \$5 \$87 \$5 \$87 \$6 \$6 \$6 \$6 \$6 \$6 \$6 \$	\$90 \$33 \$10 \$133 \$5 (\$5)	High \$202 \$74 \$15 \$292 \$55 \$55 \$292 \$2018 \$2313 \$(1.05) \$(1.41)	\$0.23 \$0.08 \$0.02 \$0.33 \$0.33 \$0.33	Mid \$0.34 \$0.13 \$0.04 \$0.51 \$0.51 2020E 263 (1.24) (1.95)	\$1.11 \$1.11 2021E 263 (1.39) (2.22)
Operational Cash Flo Net Interest Taxes Paid Other Net Operating Cashf Exploration PP&E Petroleum Assets Net Asset Sales/other Net Investing Cashfl Dividends Paid Net Debt Drawdown Equity Issues/(Buyback) Other Net Financing Cashfl Net Change in Cash	flow	2,828 (2,974) (115) (261) 0 (49) (168) 359 (120) 0 (7,878) 11,677 0 3,785 3,404	1,267 (1,885) (135) (753) 0 0 (1,848) 20,008 17,407 0 (18,497) 8,037 0 (10,693) 5,961	117 135 (30) 222 (1,278) 0 0 (472) (1,528) 0 (2,148) 0 (2,148) 0 (2,148) 3 (3,454)	450 45 (30) 465 (3,774) 0 (715) (4,024) 0 (1,893) 0 (1,893) (5,452)	NT Gas Oil US Onshore Appalachian Net cash/(debt) Corporate costs TOTAL RATIO ANALYSIS Shares Outstanding EPS (pre sig items) EPS PER	Risked Rang Low \$60 \$22 \$5 \$87 \$5 \$5 \$87 \$5 \$87 \$87 \$87 \$6 \$6 \$6 \$6 \$6 \$6 \$6 \$	\$90 \$33 \$10 \$133 \$5 (\$5)	High \$202 \$74 \$15 \$292 \$55 \$55 \$292 \$2313 \$(1.05) \$(1.41) \$na	\$0.23 \$0.08 \$0.02 \$0.33 \$0.33 \$0.33	Mid \$0.34 \$0.13 \$0.04 \$0.51 \$0.51 2020E 263 (1.24) (1.95) na	#ligh \$0.77 \$0.28 \$0.06 \$1.11 \$1.11 2021E 263 (1.39) (2.22)
Operational Cash Flo Net Interest Taxes Paid Other Net Operating Cashf Exploration PP&E Petroleum Assets Net Asset Sales/other Net Investing Cashfl Dividends Paid Net Debt Drawdown Equity Issues/(Buyback) Other Net Financing Cashf Net Change in Cash BALANCE SHEET Cash & Equivalents	flow	2,828 (2,974) (115) (261) 0 (49) (168) 359 (120) 0 (7,878) 11,677 0 3,785 3,404	1,267 (1,885) (135) (753) 0 0 (1,848) 20,008 17,407 0 (18,497) 8,037 0 (10,693) 5,961 2019 9,882	117 135 (30) 222 (1,278) 0 0 (472) (1,528) 0 (2,148) 0 (2,148) (3,454) 2020E 6,429	450 455 (30) 465 (3,774) 0 (715) (4,024) 0 (1,893) 0 (1,893) (5,452)	NT Gas Oil US Onshore Appalachian Net cash/(debt) Corporate costs TOTAL RATIO ANALYSIS Shares Outstanding EPS (pre sig items) EPS PER OCFPS	Section	\$90 \$33 \$10 \$133 \$5 (\$5)	High \$202 \$74 \$15 \$292 \$5 \$5 \$292 \$2018 \$2313 \$(1.05) \$(1.41) \$na \$(0.15)\$	\$0.23 \$0.08 \$0.02 \$0.33 \$0.33 \$0.33 \$0.33 \$0.33 \$0.40	Mid \$0.34 \$0.13 \$0.04 \$0.51 \$0.51 2020E 263 (1.24) (1.95) na 1.32	#igh \$0.77 \$0.28 \$0.00 \$1.11 \$1.11 2021E 263 (1.39) (2.22 na 2.82
Operational Cash Flo Net Interest Taxes Paid Other Net Operating Cashf Exploration PP&E Petroleum Assets Net Asset Sales/other Net Investing Cashfl Dividends Paid Net Debt Drawdown Equity Issues/(Buyback) Other Net Financing Cashf Net Change in Cash BALANCE SHEET Cash & Equivalents PP&E & Development	flow	2,828 (2,974) (115) (261) 0 (49) (168) 359 (120) 0 (7,878) 11,677 0 3,785 3,404 2018 4,157 31,241	1,267 (1,885) (135) (753) 0 0 (1,848) 20,008 17,407 0 (18,497) 8,037 0 (10,693) 5,961 2019 9,882 26,633	117 135 (30) 222 (1,278) 0 0 (472) (1,528) 0 (2,148) 0 (2,148) 0 (2,148) 3,454) 2020E 6,429 25,704	(30) (45) (465) (3,774) 0 (715) (4,024) 0 (1,893) 0 (1,893) (5,452) 2021E 977 29,928	NT Gas Oil US Onshore Appalachian Net cash/(debt) Corporate costs TOTAL RATIO ANALYSIS Shares Outstanding EPS (pre sig items) EPS PER OCCFPS CFR	Risked Rang Low \$60 \$22 \$5 \$87 \$5 \$87 \$5 \$87 \$6 \$1 \$1 \$1 \$1 \$1 \$1 \$1	\$90 \$33 \$10 \$133 \$5 (\$5)	High \$202 \$74 \$15 \$292 \$55 \$55 \$292 \$2313 \$(1.05) \$(1.41) \$na	\$0.23 \$0.08 \$0.02 \$0.33 \$0.33 \$0.33	Mid \$0.34 \$0.13 \$0.04 \$0.51 \$0.51 2020E 263 (1.24) (1.95) na	\$0.06 \$0.06 \$1.11 \$1.11 2021E 263 (1.39) (2.22
Operational Cash Flo Net Interest Taxes Paid Other Net Operating Cashf Exploration PP&E Petroleum Assets Net Asset Sales/other Net Investing Cashfl Dividends Paid Net Debt Drawdown Equity Issues/(Buyback) Other Net Financing Cashf Net Change in Cash Net Change in Cash BALANCE SHEET Cash & Equivalents PP&E & Development Exploration	flow	2,828 (2,974) (115) (261) 0 (49) (168) 359 (120) 0 (7,878) 11,677 0 3,785 3,404 2018 4,157 31,241 0	1,267 (1,885) (135) (753) 0 0 (1,848) 20,008 17,407 0 (18,497) 8,037 0 (10,693) 5,961 2019 9,882 26,633 141	117 135 (30) 222 (1,278) 0 0 (472) (1,528) 0 (2,148) 0 0 (2,148) (3,454) 2020E 6,429 25,704 127	450 45 (30) 465 (3,774) 0 0 (715) (4,024) 0 0 (1,893) 0 (1,893) (5,452) 2021E 977 29,928 114	NT Gas Oil US Onshore Appalachian Net cash/(debt) Corporate costs TOTAL RATIO ANALYSIS Shares Outstanding EPS (pre sig items) EPS PER OCCFPS CCFR DPS	Section	\$90 \$33 \$10 \$133 \$5 (\$5)	High \$202 \$74 \$15 \$292 \$55 \$55 \$292 \$2018 \$2313 \$(1.05) \$(1.41) \$na \$(0.15)\$	\$0.23 \$0.08 \$0.02 \$0.33 \$0.33 \$0.33 \$0.33 \$0.33 \$0.40	Mid \$0.34 \$0.13 \$0.04 \$0.51 \$0.51 2020E 263 (1.24) (1.95) na 1.32	#igh \$0.77 \$0.28 \$0.00 \$1.11 \$1.11 2021E 263 (1.39) (2.22 na 2.82
Operational Cash Flo Net Interest Taxes Paid Other Net Operating Cashf Exploration PP&E Petroleum Assets Net Asset Sales/other Net Investing Cashfl Dividends Paid Net Debt Drawdown Equity Issues/(Buyback) Other Net Financing Cashf Net Change in Cash BALANCE SHEET Cash & Equivalents PP&E & Development Exploration Other Assets	flow	2,828 (2,974) (115) (261) 0 (49) (168) 359 (120) 0 (7,878) 11,677 0 3,785 3,404 2018 4,157 31,241 0 28,673	1,267 (1,885) (135) (753) 0 0 (1,848) 20,008 17,407 0 (18,497) 8,037 0 (10,693) 5,961 2019 9,882 26,633 141 2,993	117 135 (30) 222 (1,278) 0 0 (472) (1,528) 0 (2,148) 0 (2,148) 0 (2,148) 3,454) 2020E 6,429 25,704 127 991	(30) (45) (45) (3,774) 0 (715) (4,024) 0 (1,893) 0 (1,893) (5,452) 2021E 977 29,928 114 1,495	NT Gas Oil US Onshore Appalachian Net cash/(debt) Corporate costs TOTAL RATIO ANALYSIS Shares Outstanding EPS (pre sig items) EPS PER OCFPS CFPR DPS Dividend Yield	Section	\$90 \$33 \$10 \$133 \$5 (\$5)	High \$202 \$74 \$15 \$292 \$55 \$292 \$2018 2313 (1.05) (1.41) na (0.15) na	\$0.23 \$0.08 \$0.02 \$0.33 \$0.33 \$0.33 \$0.33	Mid \$0.34 \$0.13 \$0.04 \$0.51 \$0.51 \$0.51 2020E 263 (1.24) (1.95) na 1.32 na	#Igh \$0.7: \$0.28 \$0.00 \$1.11 2021E (1.39) (2.22 na 2.83
Operational Cash Flo Net Interest Taxes Paid Other Net Operating Cashf Exploration PP&E Petroleum Assets Net Asset Sales/other Net Investing Cashfl Dividends Paid Net Debt Drawdown Equity Issues/(Buyback) Other Net Financing Cashf Net Change in Cash BALANCE SHEET Cash & Equivalents PP&E & Development Exploration Other Assets Total Assets	flow	2,828 (2,974) (115) (261) 0 (49) (168) 359 (120) 0 (7,878) 11,677 0 3,785 3,404 2018 4,157 31,241 0 28,673 64,071	1,267 (1,885) (135) (753) 0 0 (1,848) 20,008 17,407 0 (18,497) 8,037 0 (10,693) 5,961 2019 9,882 26,633 141 2,993 39,650	117 135 (30) 222 (1,278) 0 0 (472) (1,528) 0 (2,148) 0 (2,148) (3,454) 2020E 6,429 25,704 127 991 33,251	450 455 (30) 465 (3,774) 0 (715) (4,024) 0 (1,893) 0 (1,893) (5,452) 2021E 977 29,928 114 1,495 32,515	NT Gas Oil US Onshore Appalachian Net cash/(debt) Corporate costs TOTAL RATIO ANALYSIS Shares Outstanding EPS (pre sig items) EPS PER OCFPS CFR DPS Dividend Yield BVPS	\$5 \$5 \$87 \$5 \$87 \$5 \$87 \$5 \$87 \$5 \$87 \$5 \$87 \$5 \$87 \$5 \$87 \$5 \$87 \$5 \$87 \$5 \$87 \$5 \$87 \$5 \$87 \$5 \$87 \$6 \$80 \$6 \$87 \$6 \$80 \$6 \$60 \$6 \$80 \$60 \$6 \$80 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$60 \$6	\$90 \$33 \$10 \$133 \$5 (\$5)	High \$202 \$74 \$15 \$292 \$55 \$55 \$292 \$2018 \$2313 \$(1.05) \$(0.15) \$na	\$0.23 \$0.08 \$0.02 \$0.33 \$0.33 \$0.33 \$0.33 \$0.45 (6.46) (9.29) na (4.12) na	Mid \$0.34 \$0.13 \$0.04 \$0.51 \$0.51 \$0.51 2020E 263 (1.24) (1.95) na 1.32 na	High \$0.7: \$0.2: \$0.00 \$1.11 \$1.11 \$1.11 \$20218 \$1.39 \$1.2: \$1.39 \$1.2: \$1.39 \$1.2: \$1.39
Operational Cash Flo Net Interest Taxes Paid Other Net Operating Cashf Exploration PP&E Petroleum Assets Net Asset Sales/other Net Investing Cashfl Dividends Paid Net Debt Drawdown Equity Issues/(Buyback) Other Net Financing Cashf Net Change in Cash BALANCE SHEET Cash & Equivalents PP&E & Development Exploration Other Assets Debt	flow	2,828 (2,974) (115) (261) 0 (49) (168) 359 (120) 0 (7,878) 11,677 0 3,785 3,404 2018 4,157 31,241 0 28,673 64,071 24,369	1,267 (1,885) (135) (753) 0 0 (1,848) 20,008 17,407 0 (18,497) 8,037 0 (10,693) 5,961 2019 9,882 26,633 141 2,993 39,650 6,481	117 135 (30) 222 (1,278) 0 0 (472) (1,528) 0 (2,148) 0 (2,148) (3,454) 2020E 6,429 25,704 127 991 33,251 4,883	450 45 (30) 465 (3,774) 0 (715) (4,024) 0 (1,893) (5,452) 2021E 977 29,928 114 1,495 32,515 2,990	NT Gas Oil US Onshore Appalachian Net cash/(debt) Corporate costs TOTAL RATIO ANALYSIS Shares Outstanding EPS (pre sig items) EPS PER OCFPS CFR DPS Dividend Yield BWPS Price/Book	Sisked Range	\$90 \$33 \$10 \$133 \$5 (\$5)	High \$202 \$74 \$15 \$292 \$55 \$292 \$2018 2313 (1.05) (1.41) na (0.15) na	\$0.23 \$0.08 \$0.02 \$0.33 \$0.33 \$0.33 \$0.33 \$0.33 \$0.40	Mid \$0.34 \$0.13 \$0.04 \$0.51 \$0.51 2020E 263 (1.24) (1.95) na 1.32 na 4.5 5.4x	High \$0.7: \$0.26 \$0.00 \$1.11 \$
Operational Cash Flo Net Interest Taxes Paid Other Net Operating Cashf Exploration PP&E Petroleum Assets Net Asset Sales/other Net Investing Cashfl Dividends Paid Net Debt Drawdown Equity Issues/(Buyback) Other Net Financing Cashf Net Change in Cash Net Change in Cash BALANCE SHEET Cash & Equivalents PP&E & Development Exploration Other Assets Total Assets Debt Other Liabilities	flow	2,828 (2,974) (115) (261) 0 (49) (168) 359 (120) 0 (7,878) 11,677 0 3,785 3,404 2018 4,157 31,241 0 28,673 64,071 24,369 18,332	1,267 (1,885) (135) (753) 0 0 (1,848) 20,008 17,407 0 (18,497) 8,037 0 (10,693) 5,961 2019 9,882 26,633 141 2,993 39,650 6,481 19,504	117 135 (30) 222 (1,278) 0 0 (472) (1,528) 0 (2,148) 0 (2,148) 3,454) 2020E 6,429 25,704 127 991 33,251 4,883 20,846	450 45 (30) 465 (3,774) 0 0 (715) (4,024) 0 (1,893) 0 (1,893) (5,452) 2021E 977 29,928 114 1,495 32,515 2,990 25,212	NT Gas Oil US Onshore Appalachian Net cash/(debt) Corporate costs TOTAL RATIO ANALYSIS Shares Outstanding EPS (pre sig items) EPS PER OCCFPS CFR DPS Dividend Yield BVPS Price/Book ROE	See	\$90 \$33 \$10 \$133 \$5 (\$5)	High \$202 \$74 \$15 \$292 \$55 \$55 \$292 \$2018 \$2313 \$(1.05) \$(0.15) \$na	\$0.23 \$0.08 \$0.02 \$0.33 \$0.33 \$0.33 \$0.33 \$0.43	Mid \$0.34 \$0.13 \$0.04 \$0.51 \$0.51 \$0.51 2020E 263 (1.24) (1.95) na 1.32 na 4.5 5.4x na	High \$0.7: \$0.28 \$0.00 \$1.11 \$
Operational Cash Flo Net Interest Taxes Paid Other Net Operating Cashf Exploration PP&E Petroleum Assets Net Asset Sales/other Net Investing Cashfl Dividends Paid Net Debt Drawdown Equity Issues/(Buyback) Other Net Financing Cashf Net Change in Cash Net Change in Cash BALANCE SHEET Cash & Equivalents PP&E & Development Exploration Other Assets Debt Other Liabilities Total Liabilities	flow low US\$000s	2,828 (2,974) (115) (261) 0 (49) (168) 359 (120) 0 (7,878) 11,677 3,785 3,404 2018 4,157 31,241 0 28,673 64,071 24,369 18,332 42,701	1,267 (1,885) (135) (753) 0 0 (1,848) 20,008 17,407 0 (18,497) 8,037 0 (10,693) 5,961 2019 9,882 26,633 141 2,993 39,650 6,481 19,504 25,985	117 135 (30) 222 (1,278) 0 0 (472) (1,528) 0 (2,148) 0 0 (2,148) (3,454) 2020E 6,429 25,704 127 991 33,251 4,883 20,846 25,729	450 45 (30) 465 (3,774) 0 0 (1,893) 0 (1,893) (5,452) 2021E 977 29,928 114 1,495 32,515 2,920 25,212 28,202	NT Gas Oil US Onshore Appalachian Net cash/(debt) Corporate costs TOTAL RATIO ANALYSIS Shares Outstanding EPS (pre sig items) EPS PER OCCFPS CCFR DPS Dividend Yield BVPS Price/Book ROE ROA	Section	\$90 \$33 \$10 \$133 \$5 (\$5)	High \$202 \$74 \$15 \$292 \$55 \$55 \$292 \$2018 \$2313 \$(1.05) \$(0.15) \$na	\$0.23 \$0.08 \$0.02 \$0.33 \$0.33 \$0.33 \$0.33 \$0.33 \$0.40	Mid \$0.34 \$0.13 \$0.04 \$0.51 \$0.51 2020E 263 (1.24) (1.95) na 1.32 na 4.5 5.4x	High \$0.7: \$0.28 \$0.00 \$1.11 \$
Operational Cash Flo Net Interest Taxes Paid Other Net Operating Cashf Exploration PP&E Petroleum Assets Net Asset Sales/other Net Investing Cashfl Dividends Paid Net Debt Drawdown Equity Issues/(Buyback) Other Net Financing Cashf Net Change in Cash BALANCE SHEET Cash & Equivalents PP&E & Development Exploration Other Assets Debt Uther Liabilities Total Liabilities Net Assets/Sharehol	flow low US\$000s	2,828 (2,974) (115) (261) (49) (168) 359 (120) (7,878) 11,677 0 3,785 3,404 2018 4,157 31,241 0 28,673 64,071 24,369 18,332 42,701 21,370	1,267 (1,885) (135) (753) 0 0 (1,848) 20,008 17,407 0 (18,497) 8,037 0 (10,693) 5,961 2019 9,882 26,633 141 2,993 39,650 6,481 19,504 25,985 13,665	117 135 (30) 222 (1,278) 0 0 (472) (1,528) 0 (2,148) 0 (2,148) (3,454) 2020E 6,429 25,704 127 991 33,251 4,883 20,846 25,729 7,522	(30) (45) (3774) (6) (715) (4,024) (1,893) (5,452) (1,893) (5,452) (1,493) (1,495) 32,515 2,9902 25,212 28,202 4,313	NT Gas Oil US Onshore Appalachian Net cash/(debt) Corporate costs TOTAL RATIO ANALYSIS Shares Outstanding EPS (pre sig items) EPS PER OCFPS CFR DPS Dividend Yield BVPS Price/Book ROE ROA (Trailing) Debt/Cash	Section	\$90 \$33 \$10 \$133 \$5 (\$5)	High \$202 \$74 \$15 \$292 \$55 \$55 \$292 \$2018 \$2313 \$(1.05) \$(0.15) \$na	\$0.23 \$0.08 \$0.02 \$0.33 \$0.33 \$0.33 \$0.33 \$0.43	Mid \$0.34 \$0.13 \$0.04 \$0.51 \$0.51 \$0.51 2020E 263 (1.24) (1.95) na 1.32 na 4.5 5.4x na	High \$0.7: \$0.28 \$0.00 \$1.11 \$
Operational Cash Flo Net Interest Taxes Paid Other Net Operating Cashf Exploration PP&E Petroleum Assets Net Asset Sales/other Net Investing Cashfl Dividends Paid Net Debt Drawdown Equity Issues/(Buyback) Other Net Financing Cashf Net Change in Cash BALANCE SHEET Cash & Equivalents PP&E & Development Exploration Other Assets Debt Other Liabilities Net Liabilities Net Lassets/Sharehol Net Cash/(Debt)	flow low US\$000s	2,828 (2,974) (115) (261) 0 (49) (168) 359 (120) 0 (7,878) 11,677 0 3,785 3,404 2018 4,157 31,241 0 28,673 64,071 24,369 18,332 42,701 21,370 (20,211)	1,267 (1,885) (135) (753) 0 0 (1,848) 20,008 17,407 0 (18,497) 8,037 0 (10,693) 5,961 2019 9,882 26,633 141 2,993 39,650 6,481 19,504 25,985	117 135 (30) 222 (1,278) 0 0 (472) (1,528) 0 (2,148) 0 0 (2,148) (3,454) 2020E 6,429 25,704 127 991 33,251 4,883 20,846 25,729	450 45 (30) 465 (3,774) 0 0 (1,893) 0 (1,893) (5,452) 2021E 977 29,928 114 1,495 32,515 2,920 25,212 28,202	NT Gas Oil US Onshore Appalachian Net cash/(debt) Corporate costs TOTAL RATIO ANALYSIS Shares Outstanding EPS (pre sig items) EPS DER OCFPS CFR DPS Dividend Yield BVPS Price/Book ROE ROA (Trailing) Debt/Cash Interest Cover	Section	\$90 \$33 \$10 \$133 \$5 (\$5)	High \$202 \$74 \$15 \$292 \$55 \$55 \$292 \$2018 \$2313 \$(1.05) \$(0.15) \$na	\$0.23 \$0.08 \$0.02 \$0.33 \$0.33 \$0.33 \$0.33 \$0.33 \$0.33 \$0.33 \$0.33 \$0.33 \$0.33	Mid \$0.34 \$0.13 \$0.04 \$0.51 \$0.51 \$0.51 \$0.51 2020E 263 (1.24) (1.95) na 1.32 na 4.5 5.4x na na	#High \$0.7: \$0.2: \$0.00 \$1.11 \$1.11 \$1.11 \$2021E \$0.2: \$0.00 \$1.11
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Operational Cash Flo Net Interest Taxes Paid Other Net Operating Cashf Exploration PP&E Petroleum Assets Net Asset Sales/other Net Investing Cashfl Dividends Paid Net Debt Drawdown Equity Issues/(Buyback) Other Net Financing Cashf Net Change in Cash Net Change in Cash P&E & Development Exploration Other Assets Total Assets Debt Other Liabilities Total Liabilities Net Assets/Sharehol Net Cash/(Debt) Gearing dn/(dn+e)	flow low US\$000s	2,828 (2,974) (115) (261) 0 (49) (168) 359 (120) 0 (7,878) 11,677 0 3,785 3,404 2018 4,157 31,241 0 28,673 64,071 24,369 18,332 42,701 21,370 (20,211)	1,267 (1,885) (135) (753) 0 0 (1,848) 20,008 17,407 0 (18,497) 8,037 0 (10,693) 5,961 2019 9,882 26,633 141 2,993 39,650 6,481 19,504 25,985 13,665	117 135 (30) 222 (1,278) 0 0 (472) (1,528) 0 (2,148) 0 (2,148) (3,454) 2020E 6,429 25,704 127 991 33,251 4,883 20,846 25,729 7,522	(30) (45) (3774) (6) (715) (4,024) (1,893) (5,452) (1,893) (5,452) (1,493) (1,495) 32,515 2,9902 25,212 28,202 4,313	NT Gas Oil US Onshore Appalachian Net cash/(debt) Corporate costs TOTAL RATIO ANALYSIS Shares Outstanding EPS (pre sig items) EPS DER OCFPS CFR DPS Dividend Yield BVPS Price/Book ROE ROA (Trailing) Debt/Cash Interest Cover	Section	\$90 \$33 \$10 \$133 \$5 (\$5)	High \$202 \$74 \$15 \$292 \$55 \$55 \$292 \$2018 \$2313 \$(1.05) \$(0.15) \$na	\$0.23 \$0.08 \$0.02 \$0.33 \$0.33 \$0.33 \$0.33 \$0.33 \$0.33 \$0.33 \$0.33 \$0.33 \$0.33	Mid \$0.34 \$0.13 \$0.04 \$0.51 \$0.51 \$0.51 \$0.51 2020E 263 (1.24) (1.95) na 1.32 na 4.5 5.4x na na	High \$0.7' \$0.2' \$0.00 \$1.11 \$1.11 \$1.11 \$20218 \$1.11
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Source: RaaS Advisory



FINANCIAL SERVICES GUIDE

RaaS Advisory Pty Ltd ABN 99 614 783 363

Corporate Authorised Representative, number 1248415

of

BR SECURITIES AUSTRALIA PTY LTD
ABN 92 168 734 530
AFSL 456663

Effective Date: 26th November 2018



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