

MELBANA ENERGY LTD (MAY)

A Set-back in Cuba, Beehive Clock is Ticking

Melbana Energy Ltd. ('Melbana' or the 'Company') has elected to terminate its farmout agreement for Block 9 in Cuba due to a lack of progress by the farminee (Anhui Modestinner Energy Co., Ltd. ('AMEC'), a wholly owned and guaranteed subsidiary of Anhui Guangda Mining Investment Co. Ltd. ('AGMI')) towards satisfying the Conditions Precedent. MAY have indicated that they will pursue an alternative farmout transaction with a number of other potential counterparties who have continued to express an interest in the potential of Block 9. A suitable rig for the drilling of Block 9 is expected to be available in country in 2H19, which may aid these discussions.

This is obviously a setback for Block 9 and MAY in Cuba, but is not the whole story. Elsewhere in Cuba, the Company continues to await regulatory approval for the Santa Cruz Incremental Oil Recovery (IOR) project. Sherritt International have also announced that they have resumed drilling on Block 10 on the 1st of April. Sherritt intends to explore partnerships for further investment in Block 10 following completion of the current drilling, which is expected in the second quarter of 2019.

Beehive – the 6-month option has commenced

There has been more positive news from Australia regarding the WA-488-P Beehive Prospect. The final data set of 3D seismic survey data was received and accepted on the 2nd of April 2019. Total and Santos now have until the 2nd of October 2019 to exercise their option to farm-in and drill the first exploration well, which is planned to be the Beehive-1 exploration well. If the option is exercised the well could be drilled in the second half of 2020, with MAY (20% post farmout) fully carried through drilling. MAY has estimated the cost of the Beehive-1 exploration well to be within the US\$40-60 million range. STO have highlighted previously that the Beehive Prospect is a Multi-TCF gas / large light oil prospect in a new play, so depending on the outcome of the seismic evaluation, there is a reasonable chance that this well gets drilled.

Maintain Speculative Buy – Beehive increasingly important

The Company ended the March quarter with a cash balance of A\$3.73 million and no debt. Outgoings in the current June quarter are expected to be circa \$900,000. AGMI as part of their now terminated transaction did replace MAY's cash backed bank guarantee for US\$2.275m for Block 9 with an equivalent bank guarantee using its own banking facilities. Post the announcement on Block 9 we have increased our risk weighting on Block 9 and now value it at US\$24m versus US\$33m previously. Counterbalancing this to a degree we have de-risked our valuation of the Beehive Prospect (which as time goes by looks more and more like the jewel in MAY's crown) and now value it at US\$20m versus US\$16.5m previously. Obviously, if Santos and/or Total exercise their option to drill Beehive, this valuation could increase further (or vice versa). For now, we do not include a value for Santa Cruz or the Tassie Shoal Project. The net impact is a decrease in our 12-month target price to 2.2c per share from 2.5c per share. We retain our Speculative Buy Recommendation, with the option decision on Beehive now in the next 6 months a key event.

15 May 2019

Share Price:	\$0.013
Valuation	\$0.022
12-month target price	\$0.022

Brief Business Description:

MAY is an oil and gas explorer with projects in Cuba and Australia.

Hartleys Brief Investment Conclusion

At the core of our investment thesis is the Beehive-1 well option and MAY's Cuban acreage.

Executing a farm in on Block 9 in Cuba in 2019 would be key catalyst. In Australia, Santos and Total have a 6 month option to drill the Beehive prospect, offshore the Bonaparte Basin.

Chairman & CEO:

Robert Zammit	CEO
Andrew Purcell	Chairman
Michael Sandy	Non-Executive Director
Peter Stickland	Non-Executive Director

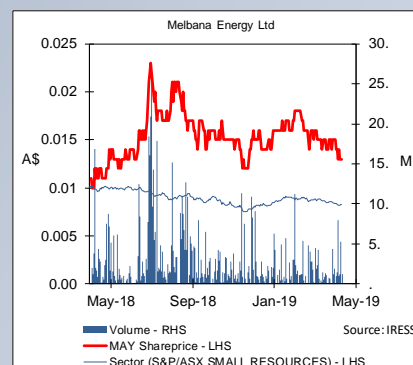
Major Shareholders:

Cadence Asset Management	6.20%
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Company Address:

Level 3
350 Collins Street
Melbourne
Victoria

Issued Capital:	1,876
- fully diluted	2,064
Market Cap:	\$24.4m
- fully diluted	\$26.8m
Current Debt	\$0.0m
Cash (end March)	\$3.7m



Source: Hartleys Research

Authors:

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Oil and Gas Analyst
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Hartleys has completed a capital raising for Melbana Energy ("MAY") for which it has earned fees. Hartleys has provided corporate advice within the past 12 months to MAY for which it has earned fees. Hartleys has a beneficial interest in unlisted options in MAY.

SUMMARY MODEL

Melbana Energy Limited MAY						May 2019 Speculative Buy				
Key Market Information						Directors				
Share Price					\$0.013	Robert Zammit	CEO			Level 3
Market Capitalisation	Ordinary				\$24.4m	Andrew Purcell	Chairman			350 Collins Street
	Fully Diluted				\$26.8m	Michael Sandy	Non-Executive Director			Melbourne
Issued Capital					1876m	Peter Stickland	Non-Executive Director			Victoria
Issued Capital (fully diluted inc. options)					2064m					
Options					181.9m					
EV	Ordinary				\$21.5m					
	Fully Diluted				\$24.0m					
Valuation					\$0.022					
12-month target price					\$0.022					
Quarterly Cash Flow						Petroleum Tenements				
						Country	Asset	MAY %		Work Program
A\$ m	FY18		FY19		12M cum	Cuba	Onshore Block 9 PSC	100%		Farm Out
	4Q	1Q	2Q	3Q		Cuba	Santa Cruz IOR	100%		Regulatory Approval
Sales	0.00	0.00	0.00	0.00	0.00	Australia	WA-488-P	100%		Potential well in 2020
E & P	-0.54	-0.31	-0.33	-0.33	-1.52		Beehive objective			
Development	0.00	0.00	0.00	0.00	0.00	Australia	Tassie Shoal Project	100%		Stakeholder engagement
Production	0.00	0.00	0.00	0.00	0.00		EPB C2000/108			
Admin	-0.54	-0.45	-0.37	-0.56	-1.92					
Other	0.00	-0.46	0.15	0.13	-0.18					
Operating Cash Flow	-1.08	-1.23	-0.55	-0.77	-3.61					
Investing Cash Flow	0.00	0.00	0.00	0.00						
Share Issuance	0.00	3.38	0.10	0.00						
Debt Issuance										
Other	0.00	0.00	0.00	0.00						
Financing Cash Flow	3.20	3.38	0.10	-3.59						
Cash Beginning	3.75	6.12	8.37	8.03						
Net Cash Flow	2.13	2.15	-0.45	-4.35						
Cash End	6.12	8.37	8.03	3.73						
						Timetable of Events				
						April 2019 - 6 month option period on Beehive commences (expires 2 October)				
						2Q19 - Sherritt Results of Block 10 Drilling				
						2019 - Block 9 Cuba Farm Out discussions				
						2H19 - Rig in country and potential drilling of primary targets in Block 9 Cuba				
						2019 - Regulatory approval expected for Santa Cruz IOR				
						2H20 - Potential Beehive-1 well if option exercised				
						Options & other instruments				
						Year Expires	Number (m)	% ord	Avg Price	\$m unpaid
						04-Aug-20	80.00	4%	0.02	1.76
						03-Nov-19	4.00	0%	0.07	0.26
						27-Mar-20	64.81	3%	0.03	1.94
						27-Sep-20	11.25	1%	0.03	0.36
						23-Nov-20	20.00	1%	0.02	0.36
						TOTAL	180.06	10%	0.03	4.68
						Major Shareholders				
							# Shares (m)	% Outstanding		
						Cadence Asset Management	116.29	6.2%		
						Andrew Purcell	62.67	3.3%		
Analyst : Aiden Bradley Phone: +61 8 9268 2876						Last updated May 15, 2019				
Sources: IRESS, Company Information, Hartleys Research										

HIGHLIGHTS

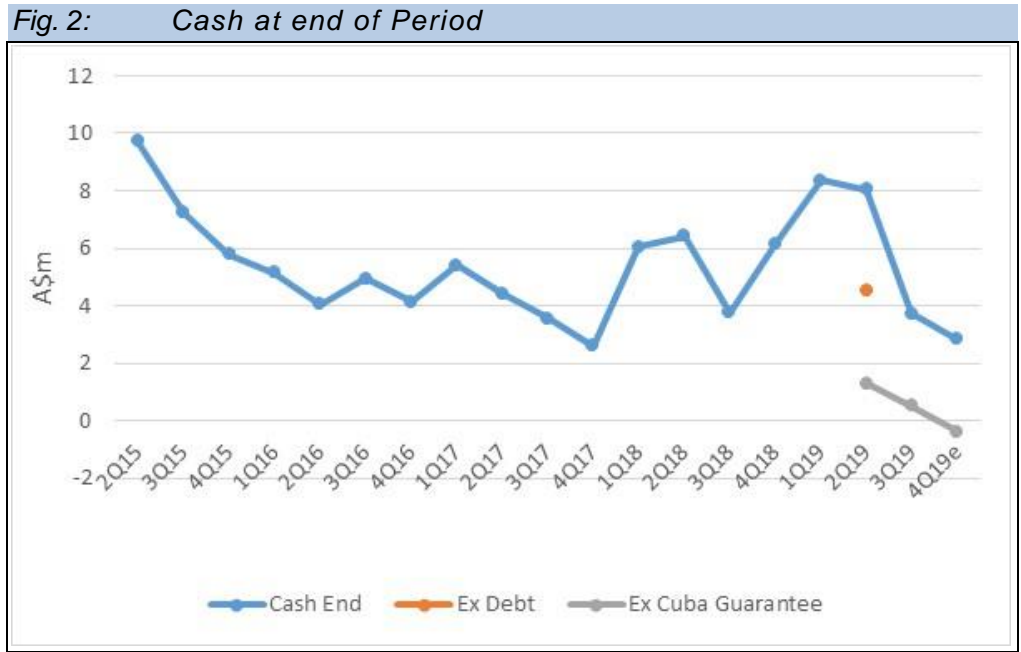
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Fig. 1: Summary of Prospective Resources Estimates

Melbana Energy Ltd. Cuba and Australia Resources Summary of Prospective Resources Estimates - Property Gross Values Effective April 30, 2018								Table 1c
Prospective Resources - Total BOE(6)		Prospective Resources - Unrisked (1) (2)				Chance of Discovery %	Risky Resources Mean (2) MMboe	
Prospect/Lead	Working Interest Maturity	Low (P90) MMboe	P50 MMboe	Mean MMboe	High (P10) MMboe			
Cuba								
Alameda	Prospect	39	72	79	128	32%	25	
A1	Lead	4	11	13	23	12%	2	
A2	Lead	21	50	60	112	12%	7	
B	Lead	52	126	148	270	12%	18	
Zapato	Prospect	38	95	114	214	23%	26	
C2	Lead	29	70	84	153	16%	14	
E	Lead	7	16	19	35	16%	3	
F	Lead	14	34	41	76	15%	6	
G1	Lead	11	26	31	58	16%	5	
G2	Lead	9	22	26	49	16%	4	
J	Lead	19	45	54	100	23%	12	
L	Lead	1	3	3	6	23%	1	
N	Lead	4	9	10	19	23%	2	
Piedra	Prospect	14	34	40	76	23%	9	
Q1	Lead	6	15	18	33	12%	2	
Q2	Lead	1	3	4	8	12%	0	
Q3	Lead	4	9	11	20	12%	1	
R	Lead	8	18	22	42	23%	5	
U1	Lead	24	60	71	132	15%	11	
Sub-Total		305	718	848	1,553		153	
Australia								
Beehive	Prospect	91	388	704	1,645	20%	142	
Sub-Total		91	388	704	1,645		142	
Total		397	1,105	1,551	3,199		295	

Source: MAY, McDaniel & Associates

The Company ended the March quarter with a cash balance of A\$3.73 million and no debt. Outgoings in the current June quarter are expected to be circa \$900,000. AGMI as part of their now terminated transaction did replace MAY's cash backed bank guarantee for US\$2.275m for Block 9 with an equivalent bank guarantee using its own banking facilities.



Source: MAY

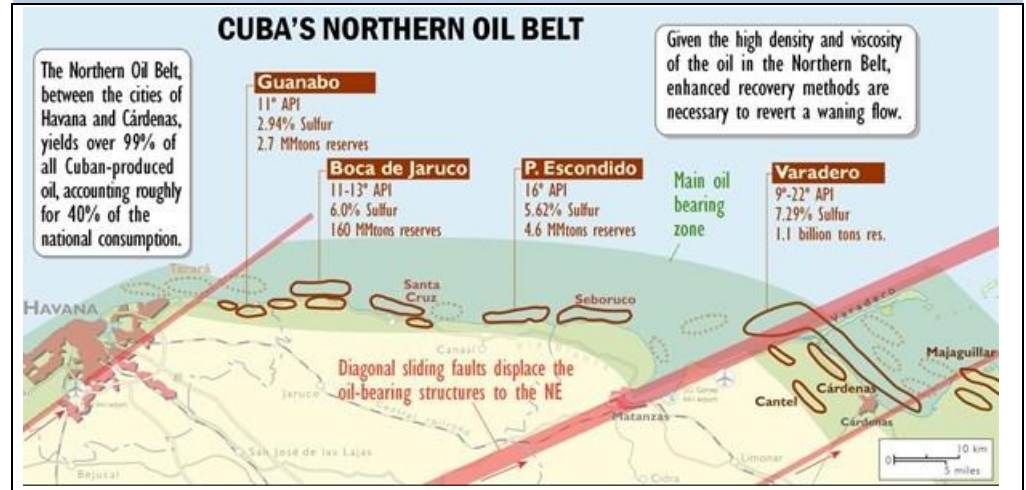
With the termination of the agreement, a waiver was granted to MAY by Cupet until the 30th of April 2019 to provide the Block 9 bank guarantee or equivalent. This timetable has obviously expired and MAY it would seem to us will now need to find the funds to provide this guarantee. The Company has indicated that they are considering a potential listing in the United Kingdom in 2H19.

This is obviously a setback for Block 9 and MAY in Cuba, but is not the whole story. Elsewhere in Cuba, the Company continues to await regulatory approval for the Santa Cruz Incremental Oil Recovery (IOR) project.

The Santa Cruz agreement provides MAY with an exclusive right to undertake studies to assess the potential to increase oil production from the Santa Cruz field with a view to exclusively negotiating a long-term incremental oil recovery production sharing agreement (IOR) for MAY to undertake oil production enhancement activities. If such a contractual arrangement is finalised, MAY would be entitled to incremental oil production above an agreed base line oil production rate from the Santa Cruz oil field.

Santa Cruz is a 20km² structure located immediately offshore northern Cuba. Field production in 2012 was approximately 1,600 barrels/day and by 2013 Santa Cruz had produced 7.4 million barrels from 18 wells.

Fig. 3: Cuba's Northern Oil Belt



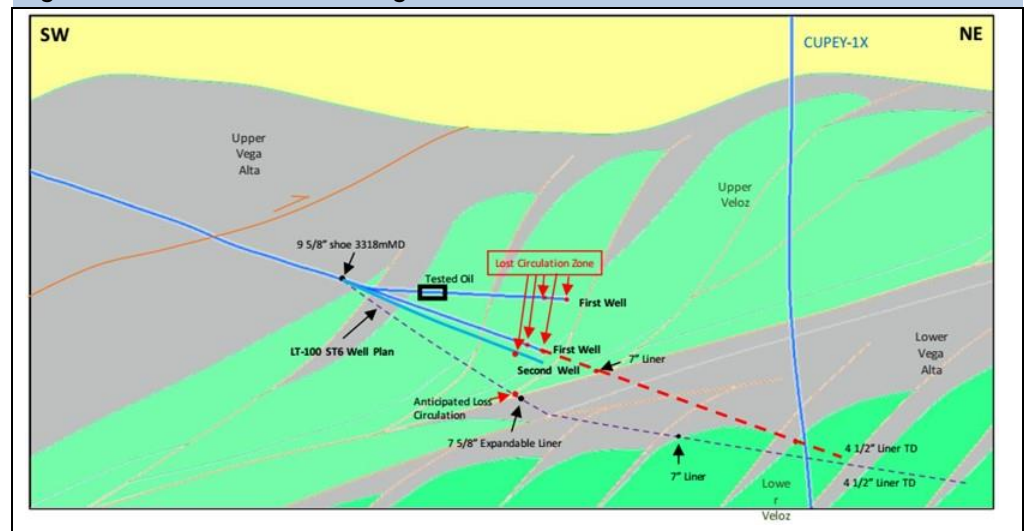
Source: Cubastandard

While the Santa Cruz contract if finalised could transform MAY's financial position, it will likely require further expenditure before cash flow can be generated. At this early stage we do not include any value for Santa Cruz in our valuation of MAY.

Sherritt International have also announced that they have resumed drilling on Block 10 on the 1st of April. Sherritt intends to explore partnerships for further investment in Block 10 following completion of the current drilling, which is expected in the second quarter of 2019.

Sherritt International are the main international oil producer in Cuba. In the face of their rapidly declining production they have been exploring Block 10 in shallow water offshore Cuba since early 2017. Drilling the well has encountered a number of problems and has had to be repeatedly stopped.

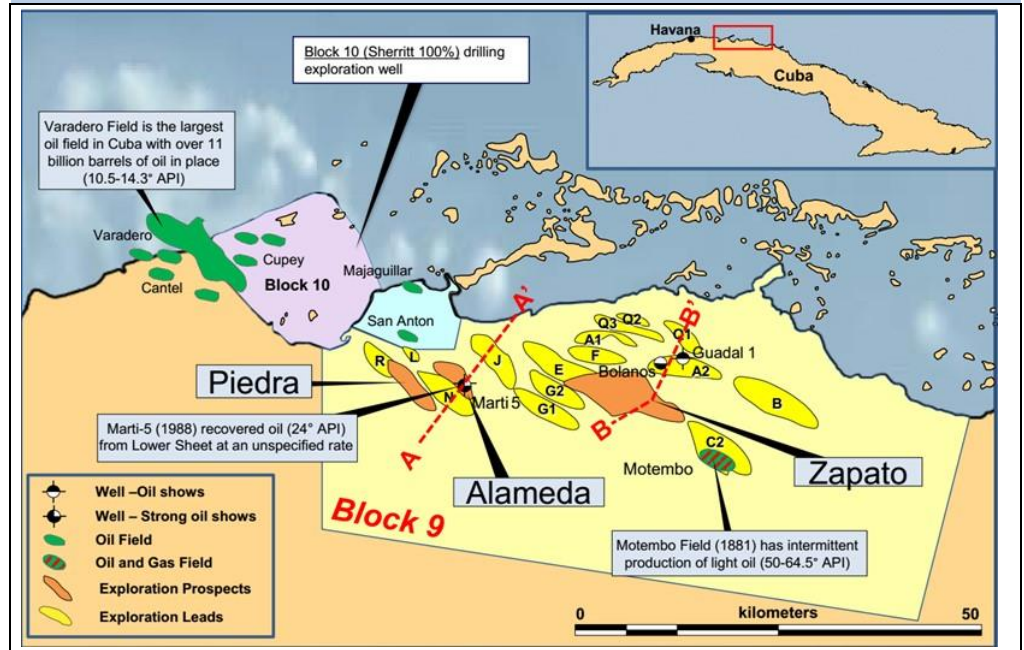
Fig. 4: Block 10 Drilling



Source: Sherritt

Block 10 resides directly to the North West of Block 9 and success here would obviously revitalise exploration interest in the North Cuba oil trend. So, the result of this well will be closely watched by all Cuban operators.

Fig. 5: Cuba Block 9 Leads and Prospects



Source: MAY

There has been more positive news from Australia regarding the WA-488-P Beehive Prospect. The final data set of 3D seismic survey data was received and accepted on the 2nd of April 2019. Total and Santos now have until the 2nd of October 2019 to exercise their option to farm-in and drill the first exploration well which is planned to be the Beehive-1 exploration well. If the option is exercised the well could be drilled in the second half of 2020, with MAY (20%) fully carried through drilling. MAY has estimated the cost of the Beehive-1 exploration well to be within the US\$40-60 million range. STO have highlighted previously that the Beehive Prospect is a Multi-TCF gas / large light oil prospect in a new play, so depending on the outcome of the seismic evaluation, there is a reasonable chance that this well gets drilled.

Fig. 6: Exploration Prospective Recoverable Resource estimates for Beehive

Objective	Type	Chance of Success	Recoverable Prospective Resource ^{2,3,4}			
			Low	Best	High	Mean
Beehive	Gas (BCF)		134	534	2,199	936
	Oil (MMbbl)		69	299	1,279	548
	TOTAL (Mmboe)	20%	91	388	1,645	704

Source: MAY

RECOMMENDATION AND RISKS

The termination of the Block 9 farmout is obviously a setback for MAY and Cuba generally. However, the market had been underwhelmed by the deal originally as the new proposed partner was an unknown entity for investors here in Australia. Given the outlined scale of the opportunity and size of the prospects, the market likely expected a more recognisable name to get involved. Whether MAY can deliver that partner now is obviously a risk as it had selected AMEC over many of these other proposed partners in the first place.

If Sherritt International announce a successful outcome this quarter to their Block 10 drilling, then this will re-rate exploration acreage in Cuba generally and improve the chances of MAY securing a farm out for their neighbouring Block 9 acreage. The Santa Cruz Incremental Oil Recovery (IOR) project also potentially offers some lower risk upside, but details are relatively scant and regulatory approval is still to be obtained.

Post the announcement on Block 9 we have increased our risk weighting on Block 9 and now value it at US\$24m versus US\$33m previously. Counterbalancing this to a degree we have de-risked our valuation of the Beehive Prospect (which as time goes by looks more and more like the jewel in MAY's crown) and now value it at US\$20m versus US\$16.5m previously. Obviously, if Santos and/or Total exercise their option to drill Beehive, this valuation could increase further (or vice versa). For now, we do not include a value for Santa Cruz or the Tassie Shoal Project. The net impact is a decrease in our 12-month target price to 2.2c per share from 2.5c per share. We retain our Speculative Buy Recommendation, with the option decision on Beehive now in the next 6 months a key event.

Fig. 7: Net Risked Value (post farm outs)

Asset	Country	WI	GCoS*	CCoS*	CoS*	Overall Recoverable Resource		NPV/boe US\$/bbl	Net Risked Value	
						Gross MMboe	Net MMboe		US\$m	A\$/share
Block-9	Cuba	100%	5%	50%	3%	718	718	\$1.3	23.6	0.016
Santa Cruz	Cuba	100%							0.0	0.000
Beehive (WA-488-P)	Australia	20%	15%	92%	12%	338	68	\$2.5	19.7	0.013
Corporate										-0.008
Gross Valuation									47.7	0.022

Source: MAY and Hartleys Research.

Upcoming catalysts include;

- Australia – Beehive (20% post farm out) - Total and/or Santos 6-month option period on Beehive has commenced (expires 2 October).
- Cuba – Block 10 - Sherritt announcement on drilling in Block 10 in second quarter 2019.
- Cuba – Block 9 (currently 100%) – Block 9 farm out discussions restart.
- Cuba – Block 9 – rig is in country and the potential drilling of primary prospects in 2019 if farm out can be concluded.
- Cuba – Santa Cruz IOR – regulatory approval expected.

RISKS

Investment in the oil and gas sector should be considered high risk. There is no guarantee of exploration success. Further to this, producing assets typically decline without further exploration and development. Specific risks include exploration risk,

development risk and production risk. The ability to repay debt, especially secured against the assets of the Company can be a particular risk for exploration companies (with little or no existing cash flow).

The key risks for MAY (like most exploration companies) is making an economic discovery and obtaining the funding for ongoing exploration. Other risks include delays, key person risk, country/sovereign risk, weather, JV partner obligations, cost inflation. Investing in explorers is very risky given the value of the company (exploration value) in essence assumes that the market will recognise a portion of potential value before the results of an exploration program are known, conscious that the ultimate chance of success is low (typically 1%-20%) and that failure is much more likely, in most cases.

SIMPLE S.W.O.T. TABLE

Strengths	<p>Experienced management team. Block 9 has potential for World Class discoveries. First mover into Cuba and potential to add further to their portfolio there.</p>
Weaknesses	<p>High working interest across entire acreage position. Reliant on farm ins and larger partners. Capital constrained like most Junior Oil & Gas companies.</p>
Opportunities	<p>Potential positive decision by Santos/Total on Beehive drilling. A number of drill ready prospects could attract one or more farm in partners. The Northern Gas Pipeline (NGP) and LNG at Darwin could potentially help release value in MAY's offshore NT tenements.</p>
Threats	<p>Takeover risk. Exploration failure – geological risk. License expiry or cancellation. Environmental concerns. Takeover risk. Cash constrained and will need additional funding.</p>

Source: Hartleys Research

HARTLEYS CORPORATE DIRECTORY

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Hartleys Recommendation Categories

Buy	Share price appreciation anticipated.
Accumulate	Share price appreciation anticipated but the risk/reward is not as attractive as a "Buy". Alternatively, for the share price to rise it may be contingent on the outcome of an uncertain or distant event. Analyst will often indicate a price level at which it may become a "Buy".
Neutral	Take no action. Upside & downside risk/reward is evenly balanced.
Reduce / Take profits	It is anticipated to be unlikely that there will be gains over the investment time horizon but there is a possibility of some price weakness over that period.
Sell	Significant price depreciation anticipated.
No Rating	No recommendation.
Speculative	Share price could be volatile. While it is anticipated that, on a risk/reward basis, an investment is attractive, there is at least one identifiable risk that has a meaningful possibility of occurring, which, if it did occur, could lead to significant share price reduction. Consequently, the investment is considered high risk.
Buy	

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