

ALTONA MINING LIMITED (AOH)

SASAC approval granted

AOH has been advised by the Sichuan Railway Investment Group (SRIG) that approval has been received from SASAC for SRIG to go ahead with the investment of US\$214M in the Cloncurry Copper Project, currently owned by AOH.

SRIG still needs Sichuan provincial government approval and Australian FIRB approval, but SASAC (State owned Assets Supervision and Administration Commission) was the major hurdle. The remaining approval processes should follow, allowing deal completion within the next few months. AOH has extended the closing date of the agreement to June 2017. The deal has been in the works since mid-2015.

Under the agreement SRIG will invest US\$214M (A\$282M) cash, and AOH AOH will invest US\$25M (A\$33M) cash, into a JV company in which AOH will hold 34%, and SRIG 66%. The JV will be fully funded into production with a cash position of A\$314M covering the pre-production capex requirement of A\$294M for the Cloncurry project, according to the 2014 DFS estimate.

Cash up front – no dilution, no debt

Cash funding means AOH will avoid equity dilution and debt costs. Effectively AOH's undiluted, pre-developed project value is preserved through the JV agreement and is converted to a fully funded 34% interest.

AOH will initially operate the JV. SRIG is a provincial government owned industrial conglomerate with plans to diversify into mining. The copper concentrate from Cloncurry will be available for sale to independent smelters.

Cloncurry - +30ktpa Cu in concs, US\$1.75/lb C1 cost.

AOH's 34% share of production is estimated to average 12ktpa Cu equivalent over a 12 year project life. There are opportunities for higher output in early years, and for extension of the project life through exploration. The JV will also review the Cloncurry DFS in light of more competitive contractor rates, and the influence of infrastructure now built for Dugald River.

Hartleys estimate a post deal value for AOH of 36cps, using consensus copper price forecast of US\$2.75/lb. Operating (C1) costs of US\$1.75/lb and total (C3) costs of US\$2.00/lb are forecast.

LME copper passed US\$2.75/lb this week for the first time since mid-2015. Cloncurry is expected to come in mid-cost curve.

Focus to switch to project delivery.

The AOH/SRIG agreement is an unusual one in the context of Australian mine development. Deal execution risk is now low, leaving project execution as the main controllable risk. A residual discount to valuation may persist until the AOH/SRIG JV proves to be an efficient development vehicle, or until the upside potential of the district's copper endowment is brought into focus. Hartleys' Net Asset Valuation of AOH is 34 cps and the 12 month target share price is 27cps.

14 Feb 2017 Share Price \$0.145 Valuation \$0.34 Price Target (12 month) \$0.27

Brief Business Description:

Copper explorer and developer

Hartleys Brief Investment Conclusion

Cu-Au developer focused on the Cloncurry Copper Project in Queensland. Finalisation of JV and financing agreement in process.

Chairman & MD

Kevin Malonev (Chairman)

Alistair Cowden (Managing Director)

Top Shareholders

Perpetual Limited	14.8%
Matchpoint Investment Management	9.8%
Tulla Resources Group Pty Ltd	6.6%
Company Address	
_evel 1, 2 Kings Park Road	
West Perth, WA 6005	

West Felli, WA 0005	
ssued Capital	545m
- fully diluted	545m
Market Cap	A\$79m
- fully diluted	A\$79m
Cash (31 Dec 16)	A\$39m
Debt (31 Dec 16)	A\$0m
EV	A\$40m

Prelim. (A\$m)	FY19e	FY20e	FY18e
Prod (kt Cu equiv)	0	12.0	12.0
Op Cash Flw (A\$M)	-5	57	56
Norm NPAT (A\$M)	-4	34	33
CF/Share (cps)	-0.9	10.4	10.2
EPS (cps)	-0.6	6.2	6.0
P/E	0.0	2.4	2.4
	Mt	Cu %	Au g/t
Resources (kt)	288	0.58	0.04
Reserves (kt)	86	0.50	0.07



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SUMMARY MODEL

Market Information								
Share price Market Capitalisation Net cash (debt) Issued Capital (fully diluted) EV Valuation 12 month price target		\$0.15 \$79m \$42m 545m \$37m \$0.34 \$0.27						
Profit & Loss	Unit	Jun 17	Jun 18	Jun 19	Jun 20	Jun 21	Jun 22	Jun 23
		Juli 17	Juli 16	Juli 19	95			
Net Revenue Forward sales	A\$M A\$M					94	93	93
Total Costs EBITDA	A\$M A\$M	-5 -5	-5 -5	-5 -5	-38 57	-38 56	-38 55	-39 54
- margin Depreciation/Amort	A\$M				60%	60%	59% -10	58% -10
EBIT Net Interest	A\$M A\$M	-5	-5	-5	48	47	45	44
Pre-Tax Profit	A\$M	-5	-5	-5	48	47	45	44
Tax Expense NPAT	A\$M A\$M	-5	-5	2 -4	-14 34	-14 33	-14 32	-13 31
Abnormal Items Reported Profit	A\$M A\$M	-5	-5	-4	34	33	32	31
Balance Sheet	Unit	Jun 17	Jun 18	Jun 19	Jun 20	Jun 21	Jun 22	Jun 23
Cash	A\$M	37	96	47	66	88	105	115
Other Current Assets Total Current Assets	A\$M A\$M	0 38	0 97	0 47	0 66	0 89	0 105	0 116
Property, Plant & Equip.	A\$M		49	94	101	96	91	86
Investments/other Tot Non-Curr. Assets	A\$M A\$M	15 15	49	94	101	96	91	86
Total Assets Short Term Borrowings	A\$M A\$M	53	146	141	167	185	196	201
Other Total Curr. Liabilities	A\$M A\$M	1	1	1	1	1	1	1 1
Long Term Borrowings	A\$M	0						. 0
Other Total Non-Curr. Liabil.	A\$M A\$M	ō	0 0	0 0	0 0	ō	0 0	ō
Total Liabilities	A\$M	1	1	1	1	1	1	1
Net Assets	A\$M	52	145	140	166	184	195	200
Cashflow	Unit	Jun 17	Jun 18	Jun 19	Jun 20	Jun 21	Jun 22	Jun 23
Operating Cashflow Income Tax Paid	A\$M A\$M	-5	-5	-5	57	56	55	54
Exploration, evaluation Interest & Other	A\$M A\$M							
Operating Activities	A\$M	-5	-5	-5	57	56	55	54
Property, Plant & Equip.	A\$M		64	-44	-16	-5	-5	-5
Exploration Asset sales	A\$M A\$M							
Investments Investment Activities	A\$M							-5
	A\$M		64	-44	-16	-5	-5	-5
Borrowings	A\$M		64	-44	-16	-5	-5	-5
Borrowings Equity Financing Activities	A\$M A\$M A\$M		64	-44	-16	-5	-5	-5
	A\$M A\$M	-5	64 59	-44 -49	-16 41	-5 51	-5 50	50
Equity Financing Activities Net Cash Change Shares	A\$M A\$M A\$M A\$M Unit	Jun 17	59 Jun 18	-49 Jun 19	41 Jun 20	51 Jun 21	50 Jun 22	50 Jun 23
Equity Financing Activities Net Cash Change Shares Ordinary Shares - End	A\$M A\$M A\$M A\$M A\$M M	Jun 17 545	59 Jun 18 545	-49 Jun 19 545	41 Jun 20 545	51 Jun 21 545	50 Jun 22 545	50 Jun 23 545
Equity Financing Activities Net Cash Change Shares Ordinary Shares - End Ratio Analysis	A\$M A\$M A\$M A\$M A\$M Unit	Jun 17 545 Jun 17	59 Jun 18 545 Jun 18	-49 Jun 19 545 Jun 19	41 Jun 20 545 Jun 20	51 Jun 21 545 Jun 21	50 Jun 22 545 Jun 22	50 Jun 23 545 Jun 23
Equity Financing Activities Net Cash Change Shares Ordinary Shares - End Ratio Analysis GCFPS CFR	A\$M	Jun 17 545 Jun 17 -0.9	59 Jun 18 545 Jun 18 -0.9	-49 Jun 19 545 Jun 19 -0.9	41 Jun 20 545 Jun 20 10.4 1.4	51 Jun 21 545 Jun 21 10.2 1.4	50 Jun 22 545 Jun 22 10.1 1.4	50 Jun 23 545 Jun 23 9.9 1.5
Equity Financing Activities Net Cash Change Shares Ordinary Shares - End Ratio Analysis GCFPS	A\$M A\$M A\$M A\$M A\$M Unit M	Jun 17 545 Jun 17	59 Jun 18 545 Jun 18	-49 Jun 19 545 Jun 19	41 Jun 20 545 Jun 20 10.4	51 Jun 21 545 Jun 21	50 Jun 22 545 Jun 22	50 Jun 23 545 Jun 23
Equity Financing Activities Net Cash Change Shares Ordinary Shares - End Ratio Analysis GCFPS CFR EPS PER DPS	A\$M A\$M A\$M A\$M A\$M A\$M Unit M Unit A¢ X A¢ X %	Jun 17 545 Jun 17 -0.9 -0.9	59 Jun 18 545 Jun 18 -0.9 -0.9 na	-49 Jun 19 545 Jun 19 -0.9 -0.6 na	41 Jun 20 545 Jun 20 10.4 1.4 6.2 2.4 na	51 Jun 21 545 Jun 21 10.2 1.4 6.0 2.4 na	50 Jun 22 545 Jun 22 10.1 1.4 5.8 2.5 na	50 Jun 23 545 Jun 23 9.9 1.5 5.6 2.6 na
Equity Financing Activities Net Cash Change Shares Ordinary Shares - End Ratio Analysis GCFPS CFR EPS PER DPS Yield Interest Cover	A\$M A\$M A\$M A\$M A\$M Unit M Unit A¢ X A¢ X % %	Jun 17 545 Jun 17 -0.9 -0.9 na na	59 Jun 18 545 Jun 18 -0.9 -0.9	-49 Jun 19 545 Jun 19 -0.9 -0.6 na	41 Jun 20 545 Jun 20 10.4 1.4 6.2 2.4 na na	51 Jun 21 545 Jun 21 10.2 1.4 6.0 2.4 na na	50 Jun 22 545 Jun 22 10.1 1.4 5.8 2.5 na na	50 Jun 23 545 Jun 23 9.9 1.5 5.6 2.6 na na
Equity Financing Activities Net Cash Change Shares Ordinary Shares - End Ratio Analysis GCFPS CFR EPS PER DPS Yield Interest Cover ROCE ROCE	A\$M A\$M A\$M A\$M A\$M Unit M Unit A¢ X A¢ X % % %	Jun 17 545 Jun 17 -0.9 -0.9	59 Jun 18 545 Jun 18 -0.9 -0.9 na	-49 Jun 19 545 Jun 19 -0.9 -0.6 na	41 Jun 20 545 Jun 20 10.4 1.4 6.2 2.4 na	51 Jun 21 545 Jun 21 10.2 1.4 6.0 2.4 na	50 Jun 22 545 Jun 22 10.1 1.4 5.8 2.5 na	50 Jun 23 545 Jun 23 9.9 1.5 5.6 2.6 na
Equity Financing Activities Net Cash Change Shares Ordinary Shares - End Ratio Analysis GCFPS CFR EPS PER DPS Yield Interest Cover ROCE ROCE Gearing Debt/Equity	A\$M A\$M A\$M A\$M A\$M Unit M Unit A¢ X X % % % %	Jun 17 545 Jun 17 -0.9 -0.9 na na 33%	59 Jun 18 545 Jun 18 -0.9 -0.9 na na -10%	-49 Jun 19 545 Jun 19 -0.9 -0.6 na na -5%	41 Jun 20 545 Jun 20 10.4 6.2 2.4 na na 48%	51 Jun 21 545 Jun 21 10.2 1.4 6.0 2.4 na na na 48%	50 Jun 22 545 Jun 22 10.1 1.4 5.8 2.5 na na 49%	50 Jun 23 545 Jun 23 9.9 1.5 5.6 2.6 na na s
Equity Financing Activities Net Cash Change Shares Ordinary Shares - End Ratio Analysis GCFPS CFR EPS PER DPS Yield Interest Cover ROCE Gearing Debt/Equity *All values fully diluted unless otherwi	A\$M A\$M A\$M A\$M A\$M Unit M Unit A¢ X X % % % %	Jun 17 545 Jun 17 -0.9 -0.9 na na -33% -10%	59 Jun 18 545 Jun 18 -0.9 -0.9 na na -10%	-49 Jun 19 545 Jun 19 -0.9 -0.6 na na -5%	41 Jun 20 545 Jun 20 10.4 6.2 2.4 na na 48%	51 Jun 21 545 Jun 21 10.2 1.4 6.0 2.4 na na na 48%	50 Jun 22 545 Jun 22 10.1 1.4 5.8 2.5 na na 49%	50 Jun 23 545 Jun 23 9.9 1.55 5.6 2.6 na na 22%
Equity Financing Activities Net Cash Change Shares Ordinary Shares - End Ratio Analysis GCFPS CFR EPS PER DPS Yield Interest Cover ROCE ROCE ROE Gearing Deb/UEquity 'All values fully diluted unless otherwi	A\$M A\$M A\$M A\$M A\$M Unit M Unit A¢ X X % % % %	Jun 17 545 Jun 17 -0.9 -0.9 na na -10% -10%	59 Jun 18 545 Jun 18 -0.9 -0.9 na na -10%	-49 Jun 19 545 Jun 19 -0.9 -0.6 na na -5% -4%	41 Jun 20 545 Jun 20 10.4 6.2 2.4 na na 48%	51 Jun 21 545 Jun 21 10.2 1.4 6.0 2.4 na na na 48%	50 Jun 22 545 Jun 22 10.1 1.4 5.8 2.5 na na 49%	50 Jun 23 545 Jun 23 9.9 1.55 5.6 2.6 na na 22%
Equity Financing Activities Net Cash Change Shares Ordinary Shares - End Ratio Analysis GCFPS CFR EPS PER DPS Yield Interest Cover ROCE ROCE ROCE ROE Gearing Deb/UFquity 'All values fully diluted unless otherwi Share Price Valuation (NAV) 100% Cloncurry after tax 8% DR Exploration	A\$M A\$M A\$M A\$M A\$M Unit M Unit A¢ X X % % % %	Jun 17 545 Jun 17 -0.9 -0.9 na na -33% -10% - - - - - - - - - - - - - - - - - - -	59 Jun 18 545 Jun 18 -0.9 -0.9 na na -10%	-49 Jun 19 545 Jun 19 -0.9 -0.6 na na na -5% -4% -1 -0.33 0.03	41 Jun 20 545 Jun 20 10.4 6.2 2.4 na na 48%	51 Jun 21 545 Jun 21 10.2 1.4 6.0 2.4 na na na 48%	50 Jun 22 545 Jun 22 10.1 1.4 5.8 2.5 na na 49%	50 Jun 23 545 Jun 23 9.9 1.55 5.6 2.6 na na 22%
Equity Financing Activities Net Cash Change Shares Ordinary Shares - End Ratio Analysis GCFPS CFR EPS PER DPS Yield Interest Cover ROCE ROCE ROE Gearing Deb/tEquity *All values fully diluted unless otherwi Share Price Valuation (NAV) 100% Cloncurry after tax 8% DR Exploration Corporate overheads Net cash (debt)	A\$M A\$M A\$M A\$M A\$M Unit M Unit A¢ X X % % % %	Jun 17 545 Jun 17 -0.9 -0.9 na na -33% -10%38m 180 18 -35 4	59 Jun 18 545 Jun 18 -0.9 -0.9 na na -10%	-49 Jun 19 545 Jun 19 -0.9 -0.6 na na -5% -4% -0.03 -0.03 -0.06 0.01	41 Jun 20 545 Jun 20 10.4 6.2 2.4 na na 48%	51 Jun 21 545 Jun 21 10.2 1.4 6.0 2.4 na na na 48%	50 Jun 22 545 Jun 22 10.1 1.4 5.8 2.5 na na 49%	50 Jun 23 545 Jun 23 9.9 1.55 5.6 2.6 na na 22%
Equity Financing Activities Net Cash Change Shares Ordinary Shares - End Ratio Analysis GCFPS CFR EFB PER DPS Yield Interest Cover ROCE Gearing DebV/Equity 'All values fully diluted unless otherwi Share Price Valuation (NAV) 100% Cloncurry after tax 8% DR Exploration Corporate overheads	A\$M A\$M A\$M A\$M A\$M Unit M Unit A¢ X X % % % %	Jun 17 545 Jun 17 -0.9 -0.9 na na -10% -10% -10% -180 180 18	59 Jun 18 545 Jun 18 -0.9 -0.9 na na -10%	-49 Jun 19 545 Jun 19 -0.9 -0.6 na na -5% -4% -4% 0.33 0.03	41 Jun 20 545 Jun 20 10.4 6.2 2.4 na na 48%	51 Jun 21 545 Jun 21 10.2 1.4 6.0 2.4 na na na 48%	50 Jun 22 545 Jun 22 10.1 1.4 5.8 2.5 na na 49%	50 Jun 23 545 Jun 23 9.9 1.55 5.6 2.6 na na 22%

Directors Kevin Maloney (Chairman) Alistair Cowden (Managing Director) Paul Hallam (Non-Exec Director)					Company Inf 1, 2 Kings P West Perth, 1 +61 8 9	ark Ro
Steve Scudamore (Non-Exec Director)				****	w.altonaminin	
Top Shareholders					m shares	4.00111
Perpetual Limited Matchpoint Investment Management Tulla Resources Group Pty Ltd					81 53 36	
Production Summary Cloncurry throughput	Unit Mt	Jun 19	Jun 20	Jun 21	Jun 22	Jun
Mined Cu grade	%Cu		7.00 0.50	7.00 0.50	7.00 0.50	7.0 0.:
Combined Recovery & Payability Payable copper in concs	kt	0.93	0.93 32	0.93 32	0.93 32	0.
Payable gold in concs	kozs		13	13	13	
Cu equiv Mine Life	kt yr		35 11.3	35 10.3	35 9.3	8
Inventory tonnes	Mt	86.0	79.0	72.0	65.0	58
Inventory grade	%Cu	0.5	0.5	0.5	0.5	C
AOH 34% share						
Payable copper in concs Payable gold in concs	kt kozs		11.0 4.5	11.0 4.5	11.0 4.5	11
Cu equiv	kt		12.0	12.0	12.0	11
Costs Cloncurry		Jun 19	Jun 20	Jun 21	Jun 22	Jun
Cloncurry Cost / milled tonne pre royalty	AS/t		21	22	22	
EBITDA / tonne milled ore	A\$/t		17	16	16	
Cash costs incl. royalty	A\$/lb Cu US\$/lb		2.28 1.74	2.30 1.78	2.30 1.79	2
Cu equiv. cash cost	A\$/lb Cu		2.10	2.12	2.12	2
+ deprn & amortn	US\$/lb A\$/lb Cu		1.74 2.65	1.64 2.51	1.65 2.53	1.
	US\$/lb		2.02	1.93	1.97	2
Price Assumptions	Unit	Jun 19	Jun 20	Jun 21	Jun 22	Jun
AUDUSD Copper	US\$/lb	0.760 2.88	0.763 2.75	0.772 2.75	0.778 2.75	0.7 2
	A\$/lb	3.78	3.60	3.56	3.54	3
Gold	US\$/oz A\$/oz	1375 1809	1275 1671	1250 1619	1250 1608	12 15
Sensitivity Analysis						
	•	/aluation		F	Y20 NPAT	
Base Case	Sens	0.34 -10%	+10%	Sens	33.6 -10%	+10
US Cu price +/-10% US Au price +/-10%	23% 1%	0.26 0.34	0.42 0.34	19% 2%	27.3 33.0	4
AUDUSD +/- 10%	21%	0.34	0.41	19%	27.3	4
Production +/-10% Operating Costs +/-10%	6% 20%	0.32 0.27	0.36 0.41	12% 13%	29.6 29.3	3
	2070	0.27	0.41	1370	20.0	,
Unpaid Capital Expiry year			No. (M)	\$M	Avg ex.	% (
30-Jun-18 Total			8			1.5
			•			1.3
Reserves & Resources June '16 Cloncurry Cu RESOURCE	Mt 288,3	%Cu 0.6	g/t Au 0.04	kt Cu 1.667	ozs Au 371	
Measured	64.1	0.6	0.05	404		
Indicated Inferred	98.0 124.8	0.6 0.6	0.05 0.04	539 711		
INCLUDES TOTAL RESERVE	86.0	0.5	0.07	430	203	
Little Eva	53.4 11.3	0.6 0.5	0.09	311 52		
Turkey Creek Ivv Ann	11.3 3.5	0.5	0.08	52 21		
Lady Clayre	1.0	0.6	0.27	6 12		
Bedford Stockpile	1.4 15.4	0.9 0.2	0.20	28		
•						
Hartleys model June '16	Mt	%Cu	kt Cu	g/t Au		
TOTAL CLONCURRY INVENTORY	86.0	0.5	430	0.08	207	

AOH and SRIG will form an incorporated JV to manage the Cloncurry Copper Project. AOH has initial responsibility for management appointments and project implementation.

VALUATION

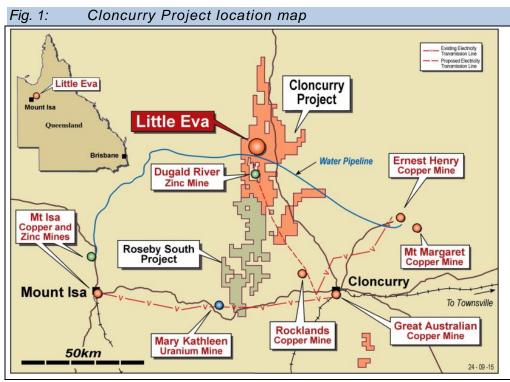
AOH is valued assuming 34% ownership of an incorporated JV with SRIG. The Cloncurry project is valued according to the base assumptions outlined in AOH's 2014 feasibility study. The Little Eva pit comprises 72% of project reserves. An average waste:ore ratio of 2:1, earth movement costs ranging from A\$6.20 to \$7.30/bcm (ore and waste), and unit treatment + G&A costs of A\$9.50/t ore are assumed. Project start-up is projected in 2019, with initial capex of A\$260M. Concentrate freight to an offshore smelter, TCRCs of US\$98/t concs and 9c/lb Cu, 97% payability for both copper and gold.

Cash flows are discounted at 8%, real and after tax.

PRICE TARGET

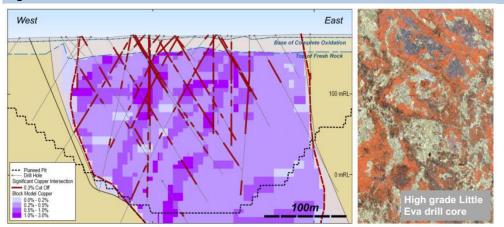
AOH and SRIG will jointly manage the project under the incorporated JV. AOH directors have experience building and managing copper operations in Northern Europe. SRIG has limited experience in mining project construction and management, and AOH will nominate the majority of the initial JV management committee. Long term, AOH's interests in the JV are protected by veto rights over major JV investment decisions.

Many successful mining projects have been operated under incorporated JVs around the World. Alignment of objectives and financial support capacity usually underwrites success. AOH and SRIG will need to continue to establish trust and common goals. A 20% discount is applied to the estimated NAV, to reflect AOH's minority status in the incorporated JV.



Source: AOH

Fig. 2: Little Eva cross section and AOH slide comments.



- Large bulk IOCG style deposit similar to Ernest Henry
- Reserves of 75Mt at 0.5% copper, 0.1g/t gold
- Turkey Creek will add 10Mt (2 years)

Source: AOH

RISKS

Fig. 3: Key assu Assumption	Risk of not realising assumption	Risk to valuation if assumption is incorrect	Comment
Project funding (66% JV partner)	Low	High	Altona is assumed close the joint venture arrangement whereby SRIG acquires 66% of the Cloncurry project. Deal failure would see AOH seek alternate debt and equity financing which may be more expensive.
Project costs	Medium	Medium	Hartleys' valuation relies on cost estimates from AOH's 2014 feasibility study. In particular, capita cost estimates may vary from FS estimates.
Exploration upside	High	Low	Less than 10% of the valuation comes from exploration potential, or material outside reserves.
JV function	Medium	High	The incorporated JV will be managed by committee comprising proportionate AOH and SRIG appointees. AOH will have veto rights over major investment decisions.
Conclusion	Project risks are tolerab		rtunities for adding value. JV management will neewatched.

Source: Hartleys Research

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Hartleys Recommendation Categories

Buy	Share price app	preciation antici	pated.

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 / It is anticipated to be unlikely that there will be gains over Take profits 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.

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Disclaimer/Disclosure

Buy

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