

1 Feb 2019

Share Price	\$0.37
Valuation	\$0.77
Price Target (12 month)	\$0.77

Brief Business Description:

Australian base metals producer and developer, with a noteworthy record in underground mine rejuvenation and operation.

Hartleys Brief Investment Conclusion

Nifty's rehabilitation is ongoing. Increasing copper production is a necessary step to a higher share price.

Chairman & MD

Peter Newton (Chairman)
Damian Marantelli (Executive Director and CEO)

Top Shareholders

Apac Resources Limited	9.2%
BlackRock Group	7.1%
Jinchuan Group Limited	7.2%
Perennial Value Management	7.1%
Australian Super	5.3%

Company Address

Level 5, 197 St Georges Tce
Perth, WA 6000

Issued Capital

- fully diluted 701m

Market Cap

- fully diluted A\$256m

Cash + WC (31 Dec 18)

A\$82m

Debt (31 Dec 18)

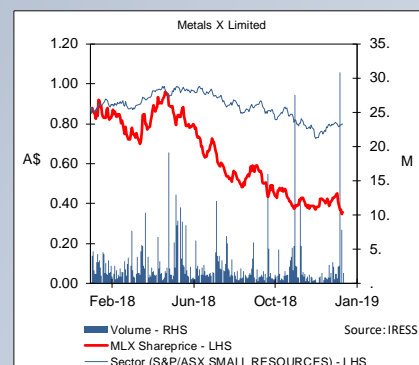
A\$0m

EV

A\$169m

	Prelim. (A\$m)	FY18	FY19e	FY20e
Prod (kt Cu)	16.1	21.6	32.8	
Prod (t Sn)	3338	3719	3939	
Op Cash Flw (A\$m)	6	28	114	
Norm NPAT (A\$m)	-33.4	3	71	
CF/Share (cps)	0.8	4.1	16.5	
EPS (cps)	-4.8	0.5	10.3	
P/E	0.0	78.9	3.5	

	Cu	Sn
Resources (kt)	1176	162
Reserves (kt)	238	83



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METALS X LIMITED (MLX)

Settling in for a slow grind higher

December quarter Nifty copper production was 5.2kt in concentrate, still around the run rate seen since early 2017, and under the production rate required for cash return. There were a few shafts of light; the mine exceeded a 7,000 tpd production rate over a 5-day period, and the concentrator operated at 8,000 tpd for a short period with limited operational challenges, demonstrating capacity to achieve the 2.5Mtpa mining and processing rate targets. Underground development rates and average mined grades (1.47% Cu) were up on the previous quarter (1.30% mined grade). The Company has been careful since September 2018 in not setting more output expectations for Nifty. The ramp-up to capacity has been and looks to be a slower grind than appreciated.

Hartleys' assumes production has been constrained by mine management issues, rather than geology. Metals X has been ringing changes at the mine to address its shortcomings, including a new roster and a camp upgrade. On the geology side the Company reported results from 34 holes (in addition to 68 holes reported already in 2018) in the eastern (down plunge) positions at Nifty. Best intercepts were in separate holes returning 5.2m at 11.3% Cu, 24.5m at 2.2% Cu, 9.7m at 3.2% Cu, 10.2m at 3.4% Cu and 25.0m at 2.3% Cu. The eastern sectors are an important resource/mining area for MLX as the Company develops away from the Central (checkerboard) zone. The Company is working on a new Nifty life of mine plan, incorporating 2018 development and drilling data. The Nifty resource will be updated in the June 2019 quarter. Resource drilling is ongoing.

Renison in good health

December quarter Renison tin production was 1.8kt. The Company has commissioned the new crusher and ore sorter. Design and development of the Area 5 high grade zone, discovered during the December quarter, are underway. High grade material is expected to become increasingly available to the plant as Area 5 comes into production from the March 2019 quarter.

The LME tin price rose to A\$29,000/t in January 2019, the highest level since late 2016. A factor in the recent rise has been Indonesia's official crackdown on illegal tin mining. An October ruling effectively blocked private smelter tin exports pending a new product verification route (PT Timah was unaffected). Indonesia is the world's biggest tin exporter.

Cash back to pre-raise (July 2018) levels

Renison partially offset the net cash outflow from Nifty. Cash, working capital and investments were down from \$111M to \$82M (including \$33M cash) over the quarter. Capital spent at Nifty of \$7M was higher than previous quarters and comprised mainly one off items. The Company has no debt.

Change from Accumulate to Speculative Buy

Once again we push our Nifty forecasts out. Pending a clearer view of the Company's Nifty mine plan by March 2019, our ore inventory assumptions are intact, underpinning the view that MLX will eventually deliver a Nifty worth owning, with no further equity dilution. We shift to Speculative Buy recommendation with a 12 month price target of 77cps.

EARNINGS CHANGES

Fig. 1: Hartleys' earnings changes from October 2018.

	30 Jun 18	30 Jun 19			30 Jun 20			30 Jun 21		
		old	new	% diff	old	new	% diff	old	new	% diff
Hartleys Production - (t Cu)	16	24	22	-9%	35	33	-5%	35	34	-3%
- (kt Sn)	3.3	3.8	3.7	-3%	4.0	3.9	-1%	4.0	3.9	-1%
Cu price (A\$/lb)	3.99	3.96	3.89	-2%	4.14	4.14	0%	4.24	4.24	0%
Sn price (A\$/t)	26.7	26.5	26.8	1%	27.7	27.7	0%	28.0	28.0	0%
AISC - A\$/lb Cu	5.12	4.13	4.51	9%	3.36	3.55	6%	3.30	3.18	-3%
- A\$/kt Sn	20.0	18.0	18.9	5%	17.7	17.7	0%	17.9	18.0	0%
Net Revenue	221	309	286	-8%	427	410	-4%	444	432	-3%
Total Cash Costs	-229	-271	-258	-5%	-314	-296	-6%	-316	-303	-4%
EBITDA	-9	38	27	-28%	113	114	1%	127	130	2%
- margin	-4%	12%	10%	-17%	26%	28%	5%	29%	30%	4%
Depreciation/Amort	-25	-16	-28	68%	-16	-35	118%	-16	-13	-21%
EBIT	-33	22	0	-100%	97	79	-18%	111	117	5%
Net Interest	0	0	0	n/a	0	0	n/a	0	0	n/a
Pre-Tax Profit	-33	22	0	-100%	97	79	-18%	111	117	5%
Tax Expense	0	0	0	n/a	0	0	n/a	0	0	n/a
- rate	0%	0%	0%	n/a	0%	0%	n/a	0%	0%	n/a
NPAT	-33	22	3	-86%	86	71	-18%	98	103	5%
Capex + exploration	-33	-19	-27	45%	-17	-17	-1%	-17	-17	0%
Net cash at EOP	29	99	65	-35%	192	158	-18%	287	260	-9%
Dividends Per Share (cents)	1	0	0	n/a	2	0	-100%	2	0	-100%

Source: Hartleys Research.

PRODUCTION AND COSTS

Fig. 2: Production forecasts.

Production Summary	Unit	Jun 18	Jun 19	Jun 20	Jun 21	Jun 22
Nifty throughput	Mt	1.36	1.68	2.30	2.40	2.40
Mined grade	%Cu	1.33	1.45	1.60	1.61	1.61
Combined Recovery & Payability		88%	89%	89%	89%	89%
Copper prodn	(kt)	16.1	21.6	32.8	34.3	34.3
Mine Life	yr	13.7	10.1	6.4	5.1	4.1
Inventory tonnes	Mt	18.6	16.9	14.6	12.2	9.8
Inventory grade	%Cu	1.59	1.60	1.60	1.60	1.60
Renison throughput (whole project)	Mt	0.73	0.74	0.74	0.74	0.74
Mined grade	%Sn	1.24	1.37	1.46	1.46	1.46
Combined Recovery & Payability		73%	73%	73%	73%	73%
Tin prodn (MLX share)	(kt)	3,338	3,719	3,939	3,939	3,939
Mine Life	yr	11.8	10.7	9.7	8.7	7.7
Inventory tonnes	Mt	8.7	7.9	7.2	6.4	5.7
Inventory grade	%Sn	1.21	1.19	1.17	1.13	1.09

Source: Hartleys Research.

Fig. 3: Cost forecasts.

Costs		Jun 18	Jun 19	Jun 20	Jun 21	Jun 22
Nifty						
Cost / milled tonne	A\$/t	120	111	94	92	92
EBITDA / tonne milled ore	A\$/t	-21	-6	30	35	35
Cash costs incl. royalty	A\$/lb Cu	4.77	4.09	3.17	3.11	3.10
	US\$/lb	3.67	3.01	2.41	2.40	2.44
+ deprn & amortn	A\$/lb Cu	5.12	4.26	3.30	3.24	3.23
	US\$/lb	3.93	3.13	2.50	2.50	2.54
Renison						
Renison cost / milled tonne	A\$/t	136	153	159	162	164
EBITDA / tonne milled ore	A\$/t	46	50	60	60	57
Cash costs incl. royalty	A\$/t Sn	16.8	17.2	16.9	17.1	17.3
	US\$/t	12.9	12.6	12.8	13.2	13.6
+ sust capital	A\$/t Sn	20.0	18.9	17.7	18.0	18.2
	US\$/t	15.3	13.9	13.5	13.9	14.3

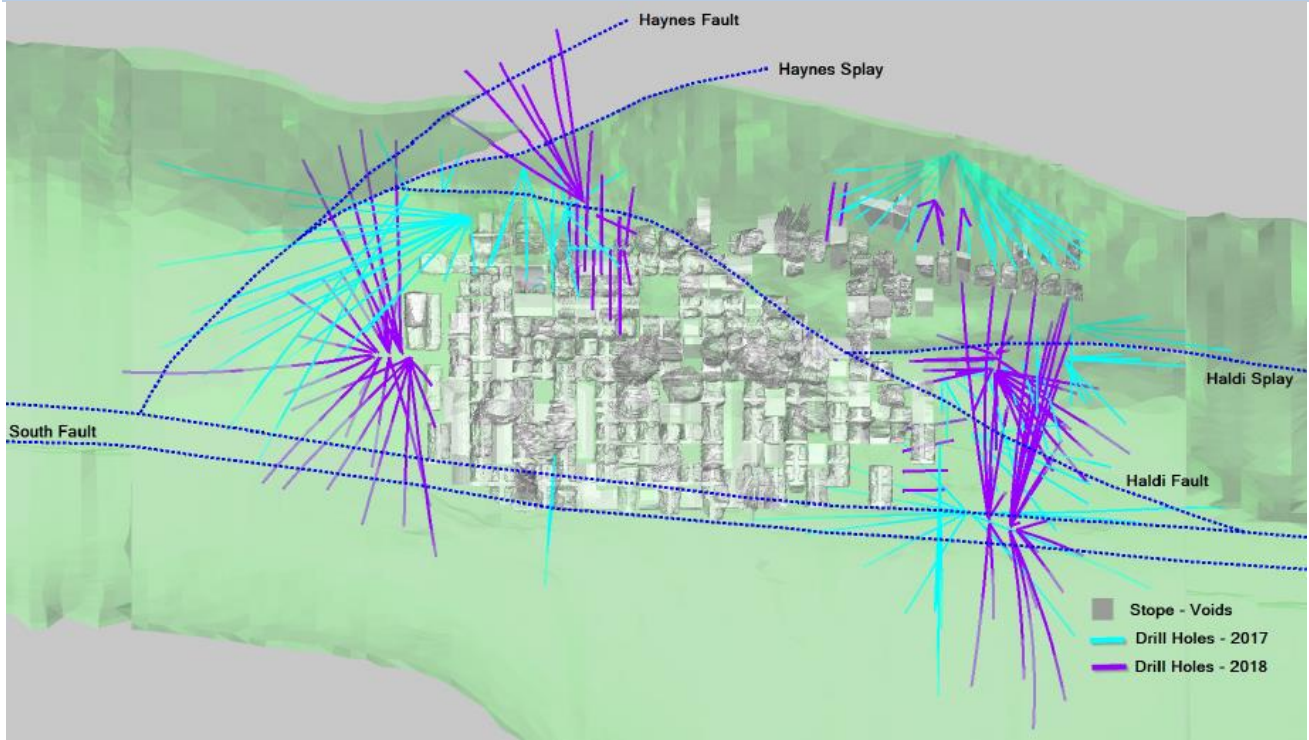
Source: Hartleys Research.

Fig. 4: Plan view of Nifty underground development, showing planned stopes (coloured shapes) for FY2019 and the checkerboard (CCB) outline in red.



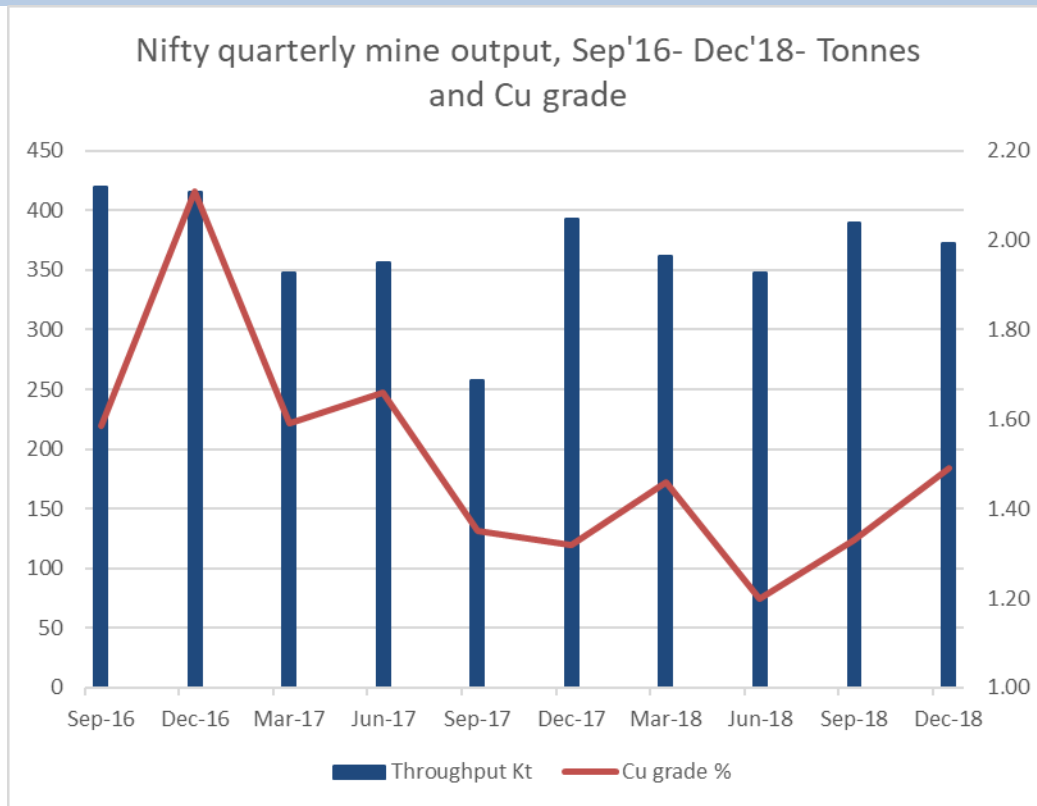
Source: Metals X, July 2018.

Fig. 5: Plan view of Nifty showing major faults and Metals X drilling to June 2018.



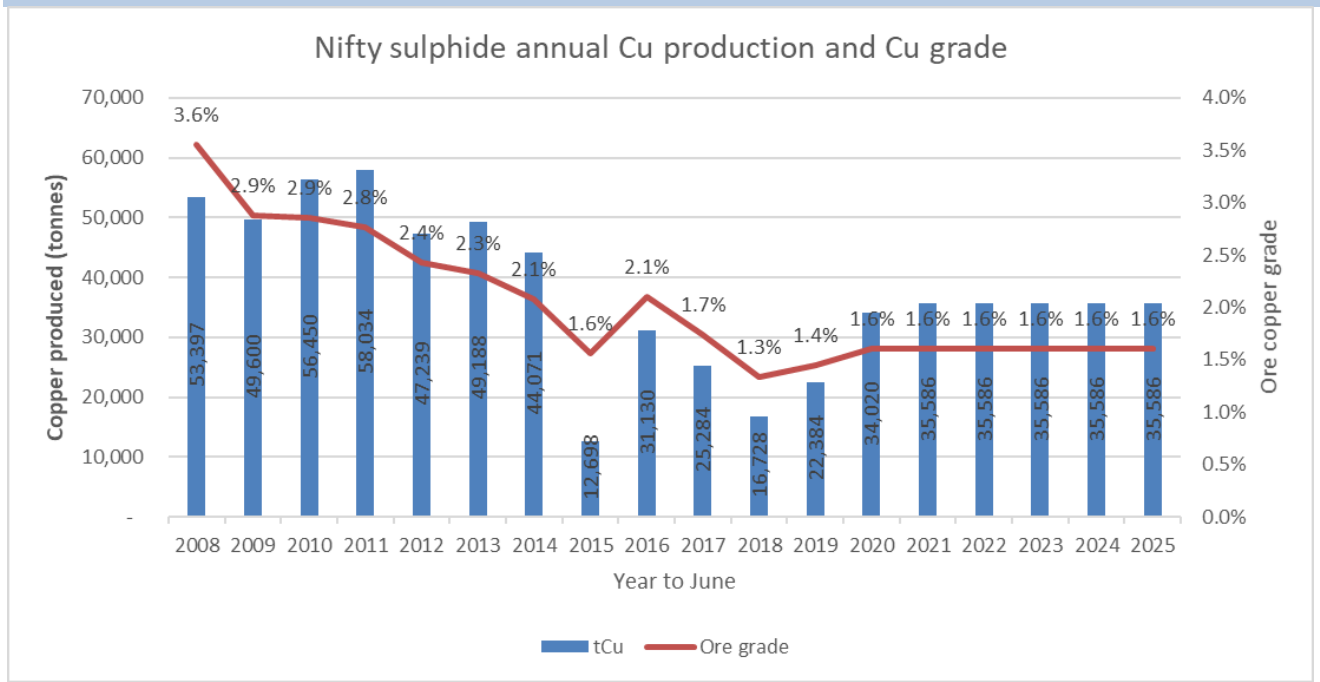
Source: Metals X, July 2018.

Fig. 6: Nifty production trends, Sept-16-Sept-18.



Source: Hartleys Research.

Fig. 7: Nifty historic production record - underground, sulphide only. Figures to FY2018 are actual. Metals X took control of operations in October 2016. Hartleys forecasts are shown from FY2019.



Source: Hartleys Research.

Hartleys' 12 month price target is \$0.77 per share.

VALUATION AND PRICE TARGET

Key model assumptions;

- Nifty 18.0 Mt inventory at 1.59% Cu, mined at 2.4 Mtpa from January 2020. 88% met/payable recovery.
The inventory is 1.5 times the August 2017 reserve, in terms of contained copper. Capital costs of definition and development are included in the model. The mine life is assumed to extend to 2026.
- Nifty site cost of \$A74/t of milled ore at full capacity, US\$82/t concs transport, US\$95, 0.09 TCRC, 97% payability → A\$3.12/lb C3 (C1+royalty+deprn, AUDUSD 0.78).
- Cu price as per summary table. (US\$3.00/lb long run).
- Renison 8.6Mt inventory at 1.2% Sn, mined at 900ktpa, 68% sorting/met recovery. The modelled inventory contains 50% more contained tin than the June 2018 reserves. Ore definition at Renison progresses with mining and substantial material is mined each year from outside reserves. Capital costs of definition and development are included in the model. The mine life is assumed to extend to 2027.
- Site cost of A\$100-110/t crushed ore, US\$110 concs transport, 92% net pay. US\$1.9Mpa Cu revenue → A\$18,000/t AISC.
- Sn price as per summary table; US\$19,500/t long run.
- AUDUSD 0.78 long run.
- A corporate overheads liability is included in the valuation to reflect the cost of management over the operational life of the company. Corporate overhead costs are estimated at A\$7Mpa.

Hartleys' estimated NAV for MLX is 77 cps, using price forecasts similar to consensus as set out in the summary model page.

A real, after tax discount rate of 7% is used.

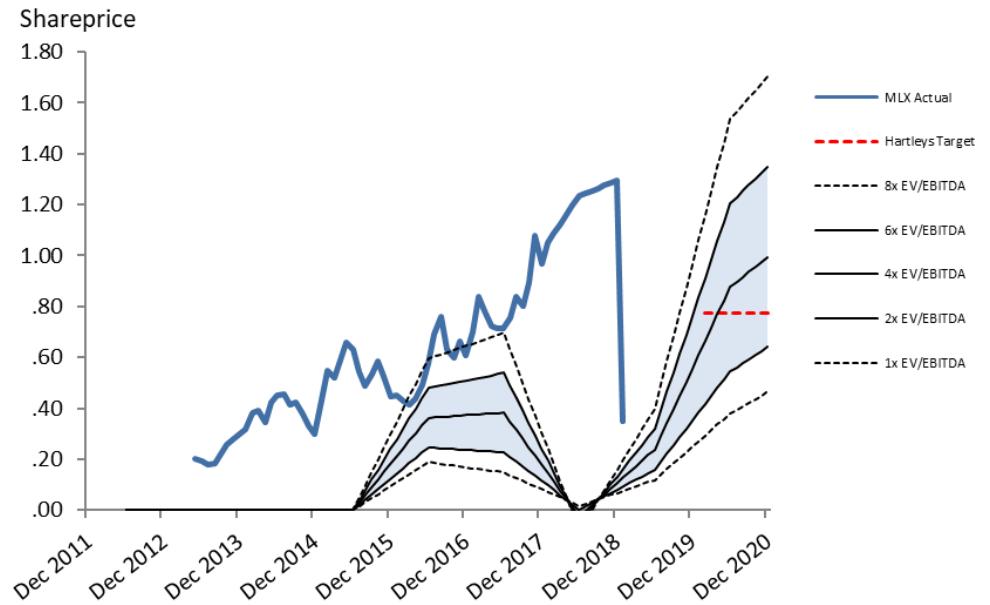
At real spot price assumptions as at 1 February 2019, the MLX NAV estimate decreases to 72cps

The 12 month price target for MLX is the estimated NAV, or 77 cps.

EV/EBITDA BANDS

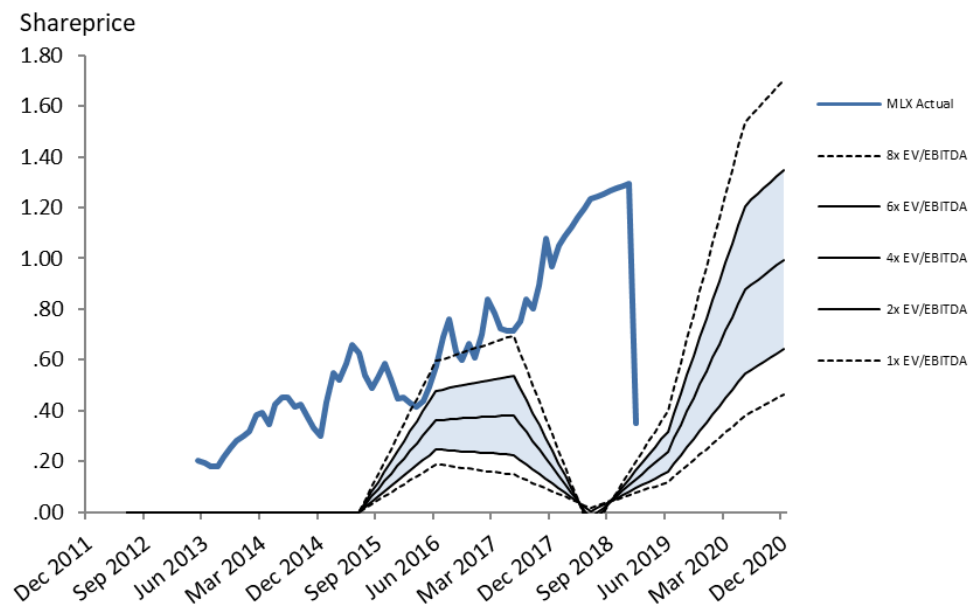
MLX completed a demerger in December 2016, splitting its gold assets into Westgold Resources (WGX.ASX).

Fig. 8: EV/EBITDA base case assumptions.



Source: Hartleys.

Fig. 9: EV/EBITDA spot price assumptions.



Source: Hartleys.

RISKS

Key assumptions and risks for valuation

Assumption	Risk of not realising assumption	Risk to valuation if assumption is incorrect	Comment
Copper price	Medium	Industry	The current spot price is similar to our LT assumptions. Current settings are considered insufficient to encourage supply growth and meet future demand.
Tin price	Medium	Industry	A marginal tin supply response is expected, bringing the tin price down to ~\$19,500/t.
Nifty ramp-up profile	High	Medium	MLX plans to return Nifty to its previous production capacity and is behind original schedule. The Company is yet to indicate a new schedule.
Nifty reserve extension	Low	High	Nifty is open down plunge and exploration drilling has begun to scope the project's potential.
Nifty costs	Medium	Medium	MLX has demonstrated unit costs at Nifty over several quarters. Costs are broadly in line with other bulk tonnage underground mines.
Renison reserve extension	Low	Medium	Renison reserves progress with mine development internally and around the margins of the resource.

Conclusion

Apparent risks have risen with Nifty ramp-up delays and the associated financial effects. Establishment of an increasing copper production profile is required to lower the risks.

Source: Hartleys Research

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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 Buy	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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