

SPEC BUY

Current Price	\$0.044
Valuation	\$0.30
Target Price	\$0.18

Ticker:	MYL		
Sector:	Metals and Mining		
Shares on Issue (m):	1,679.1		
Market Cap (\$m):	72.2		
Net Cash (\$m):	16.0		
Enterprise Value (\$m):	56.2		
52 wk High/Low:	\$0.09	\$0.04	
12m Av Daily Vol (m):	1.82		

Bawdwin Ore Reserve

Tonnes	Silver	Lead	Zinc
Mt	oz/t	%	%
18.4	5.4	6.4	3.4

Bawdwin Total JORC Resource

Tonnes	Silver	Zinc + Lead	Copper
Mt	oz/t	%	%
100.6	3.1	5.9	0.2

Bawdwin Primary High Grade Resource (inclusive)

47.0	5.2	10.2	0.2
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Bawdwin Discrete Copper Resource (inclusive)

Tonnes	Copper	Zinc + Lead	Silver
Mt	%	%	oz/t
4.4	3.0	7.8	5.7

Key Metrics (Argonaut Assumptions)

Capex Estimate	US\$300m
Steady State EBITDA (100% Basis)	US\$148m
Project NPV ₁₂ (100% Basis)	A\$622m

Development Stage PFS

Board

John Lamb	Executive Chairman and CEO
Rowan Caren	Executive Director and Secretary
Bruce Goulds	Non-Executive Director
Paul Arndt	Non-Executive Director
Jeffrey Moore	Non-Executive Director

Substantial Shareholders

Perilya Ltd	19.8%
Yandal Investments	12.4%

Share Price Graph and Ave Trading Vol. (msh)



Please refer to important disclosures at end of the report (from page 4)

Wednesday, 8 January 2020

Myanmar Metals

Expansion study extends open pit mine life

Analysts: Matthew Keane | James Wilson

Quick Read

Myanmar Metals (MYL) has completed an internal study into an expansion of the Bawdwin open pit. The study has shown the viability for two additional phases of open pit cut-backs, extracting a much higher proportion of the 101Mt polymetallic resource. This will extend the open pit mine life, prior to heading underground, and warrants a review of the scale of the processing plant (from 2Mtpa in the 2019 Pre-Feasibility Study [PFS]). Argonaut sees deep value in the stock following share price weakness in H2 2019. H1 2020 will provide strong newsflow including, ongoing drill results, the Definitive Feasibility Study (DFS) release and most importantly, attaining requisite approvals for development.

Event & Impact: Expansion study - Positive

Open pit mine life extension: MYL has completed an open pit expansion study on the Bawdwin deposit, highlighting the potential to extract a much larger proportion of the 101Mt resource from surface. Following the initial starter pit, which mines only the central China Lode to a depth of 220m below the current floor (outlined in the 2019 PFS, see [Research Report](#)), a further two phased cut-backs have been designed. Phase 2 to will deepen the pit by 50m and incorporate part of the southern Meingtha Lode and Phase 3 will deepen the pit by a further 95m. Argonaut estimates the minable resource could increase from 24.7Mt to +50Mt. As a result of the increased inventory, MYL is now considering a larger processing facility (previously 2Mtpa throughput).

Key value drivers for H1 2020: MYL is due to achieve its most value accretive milestones in the current half. Foremost will be attaining approvals from the Myanmar Investment Commission (MIC), which outlines the economic terms of the operating licence and enables MYL, as a foreign entity, to be the majority owner and operator of the project. MIC documentation is due to be lodged in February 2020 with final approvals anticipated April/May 2020. Following the MIC, the Company will release the Bawdwin DFS. Financing and offtake negotiations are ongoing and should be finalised around mid-year. Argonaut believes streaming of one or more co-products (i.e. silver/zinc) could fund a substantial portion of the pre-production capital (currently US\$300m). In addition, Zhongjin Lingnan, the parent company of MYL's major shareholder Perilya, previously provided a non-binding Letter of Support to assist in up to US\$150m financing for project construction.

Upside in the upcoming DFS: The upcoming DFS should provide value upside on the original PFS. Recent metallurgical tests have indicated higher recoveries from transitional and lower grade halo ore types and additional geotechnical drilling should facilitate steeper wall designs, lowering the overall strip ratio of the open pit. While a larger scale plant will likely increase pre-production capex, higher production rates and operational cost savings should deliver a higher overall NPV.

Recommendation

Argonaut maintains a BUY recommendation and a \$0.18/sh target price.

Expanding the open pit

The Bawdwin expansion study highlighted the potential for further open pit cut-backs...

MYL has completed an open pit expansion study on the Bawdwin deposit, which highlighted the potential for a three stage open pit, versus the single stage open pit outlined in the 2019 PFS. The study was conducted by mining consultant Cube Consulting, who also looked at the option of a bulk underground operation. The open pit scenario prevailed on the basis of higher returns and lower risk. While the Stage 2 and Stage 3 cut-backs are unlikely to be included in the upcoming DFS, due to inadequate resource confidence, they could potentially extend the mine life beyond 20 years. This provides MYL with a more robust base case for financiers and potential strategic investors and will help secure a 50 year mining term from the Myanmar Ministry of Natural Resources and Environmental Conservation. (MONREC).

...deepening the pit floor by up to 145m...

Table 1. Summary of the staged open pit development

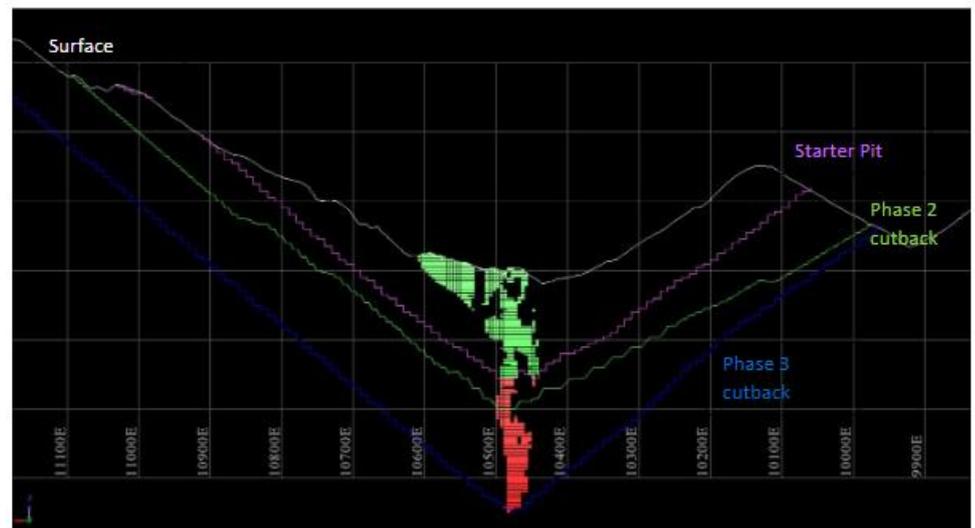
Mining phase	Comment	Status
Phase 1 (Starter Pit)	Open-pit focusing on the central China Lode with a finished pit depth of 220 metres, below the current valley floor. 24.7 million tonnes processed	PFS completed (May 2019)
Phase 2	Second cutback extending the pit south into Meingtha Lode and deepening the pit by a further 50 metres.	Expansion Study completed
Phase 3	Third cutback into the east and west pit walls, deepening the pit floor a further 95 metres.	Expansion Study completed

Source: MYL

...which we estimate could increase the minable resource to >50Mt

Argonaut estimates the minable resource could increase from 24.7Mt in the PFS starter pit to +50Mt with the expanded open pit. As a result of the increased inventory, MYL is now considering a larger processing facility. While strip ratios will increase as more of the surrounding hill slopes are mined, we believe life of mine strip ratios will remain low, at less than 10:1. Initial strip ratios in the starter pit should be less than 6:1.

Figure 1. Summary of the staged open pit development



Source: Cross-section looking north showing the proposed open pits and resource blocks to be mined in green (Indicated) and red (Inferred). Source: Cube Consulting via MYL

The upcoming DFS has potential for improved metrics...

...based on higher metallurgical recoveries, lower strip ratios and improved operating costs

Argonaut maintains a SPEC BUY recommendation with a \$0.18/sh target price

Upside in the upcoming DFS

Recent tests and study work should improve value by removing conservatism and uncertainty incorporated in the May 2019 PFS. Key areas of potential upside include:

- The ability to steepen pit walls and reduce strip ratios with increased geotechnical confidence following recent drilling
- The incorporation of lower grade ore and transitional material following successful metallurgical test results. In the PFS, 12% of the material processed was partially oxidised or transitional and assigned lower grade and recovery assumptions, with no recovery of zinc in concentrate (see MYL announcement dated 9/12/19)
- The use of larger haul trucks in the open pit, which will reduce overall mining costs
- The incorporation of additional mineralisation discovered in parallel lodes in the both the hangingwall and footwall (increasing recovered metal and reducing overall strip ratios).
- Higher production rates resulting from a larger processing plant (offset by higher pre-production capital)

Longer term, the incorporation of the stage 2 and 3 cut-backs and underground mining of the Shan Lode and deeper China/Meingtha mineralisation should extend the mine life well beyond 30 years.

Valuation and Recommendation

Due to the limited data around the expanded open pit scenario, we have maintained our current model assumptions, which has Bawdwin being mined via an initial starter pit then a series of three underground mines (see model assumptions outlined in [Research Report](#)). We will update our model when further detail is publically released. MYL recently issued 89.5m shares following the exercise of listed options, the proceeds of which raised ~\$4.5m. Subsequently, the Company is well-funded with estimated cash at 31 December of \$15-17m. Following the completion of a major resource infill drill campaign and feasibility study work, operational cash outflow should decrease (previously ~\$1.7m/month).

Argonaut maintains a SPEC BUY recommendation and a \$0.30/sh valuation. We assign a 40% discount to account for country, permitting and financing risk to achieve a \$0.18/sh target price.

Table 2. Argonaut's valuation summary

NAV Valuation		
Sum of Parts	AUD M	AUD / Share
Bawdwin 51% Share	317.4	0.17
Unmined Resources	198.7	0.11
Exploration Upside	100.0	0.05
Corporate NPV	(68.3)	(0.04)
Cash est.	16.0	0.01
Debt	-	-
Sub Total	564	0.30
Risk Weighting		40%
Target Price		0.18

Source: Argonaut

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Argonaut continues to act as Financial Adviser to MYL and will receive fees commensurate with this service. Argonaut acted as Lead Manager and Sole Bookrunner to the Placement that raised \$20.8 in May 2019 and received fees commensurate with this service. Argonaut holds or controls 1,976,923 MYL shares and 35M MYL Options exercisable at \$0.078 on or before 15 June 2020.

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