

SPEC BUY

Current Price	\$0.06
Valuation	\$0.40
Target Price	\$0.20

Ticker: **MYL**
Sector: **Metals and Mining**

Shares on Issue (m):	1,247.2
Options (m):	227.1
Market Cap (\$m):	77.3
Net Cash (\$m):	15.0
Enterprise Value (\$m):	62.3

52 wk High/Low:	\$0.10	\$0.05
12m Av Daily Vol (m):		2.58

Bawdwin Total JORC Resource

Tonnes	Silver	Zinc + Lead	Copper
Mt	oz/t	%	%
81.8	3.8	7.2	0.2

Bawdwin Primary High Grade Resource (inclusive)

Tonnes	Silver	Zinc + Lead	Copper
Mt	oz/t	%	%
44.5	5.8	11.5	0.3

Bawdwin Discrete Copper Resource (inclusive)

Tonnes	Copper	Zinc + Lead	Silver
Mt	%	%	oz/t
4.2	3	7.8	5.4

Development Stage: Scoping Study

Key Metrics (Argonaut Assumptions)

Capex Estimate	US\$190m
Steady State EBITDA (100% Basis)	US\$424m
Project NPV ₁₂ (100% Basis)	A\$967m

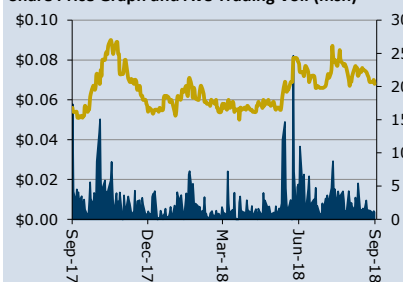
Board

John Lamb	Executive Chairman and CEO
Jeffrey Moore	Non-Executive Director
Rohan Caren	Executive Director and Secretary
Paul Arndt	Non-Executive Director

Substantial Shareholders

Perilya Ltd	19.9%
Yandal Investments	7.0%

Share Price Graph and Ave Trading Vol. (msh)



Please refer to important disclosures at the end of the report (from page 7)

Friday, 14 September 2018

Myanmar Metals

Compelling starter pit

Analysts | Matthew Keane | James Wilson

Quick Read

Myanmar Metals (MYL) released a Scoping Study for a starter pit in the China Lode of the Bawdwin Project (51% MYL). This 13 year, 250m deep starter pit provides compelling economics and would be the envy of most base metal projects globally. We estimate the 1.8Mtpa plant will produce 158ktpa Zn equivalent at minus ~US\$0.45/lb payable Zn all-in sustaining costs (after credits) and generate average Revenue and EBITDA of US\$395m and US\$165m respectively (100% basis). It is important to note that the China Lode open pit consumes only 26% of the current resource. We believe the PFS (due Q1 2019) will incorporate additional open pits and underground mines from the neighbouring Shan and Meingtha lodes to produce a +25-year mine life. In addition, there is a high likelihood of further discoveries along the 8-10km of largely unexplored prospective strike in the Bawdwin Region. We maintain a SPEC BUY recommendation with a revised target price of \$0.20/sh (from \$0.22/sh).

Event & Impact | Positive

High Value Starter pit: The Bawdwin China Lode starter pit Scoping Study assumes a 1.8Mtpa plant with US\$191m capex and US\$84 per processed tonne delivered costs, producing 78ktpa Pb, 6.2Mozpa Ag, 40ktpa Zn and 2.3ktpa Cu (158ktpa Zn Eq). over a 13-year mine life. On a standalone basis, the China Pit is compelling generating annual EBITDA of ~US\$165m (Argonaut Est., 100% basis), however it is will likely be just the first of a number of open pit and underground mines at Bawdwin. We derive a post-tax NPV₁₂ of US\$492m (100% basis) or A\$348m for MYL's attributable 51% with a 62% IRR.

Highly fundable project: While the capex estimate is high compared to the current market capitalisation (\$85m), MYL already has a non-binding letter of financial support from cornerstone investor, Perilya Ltd, for US\$150m project finance. Given the ~2-year payback on capital, we believe the project will attract a number of debt financiers in addition to offtake financiers looking to secure long life metal contracts. Future expansions and the development of additional mines should be funded through free cashflow from the China Pit (Argonaut est. FCF US\$126m pa).

Recommendation

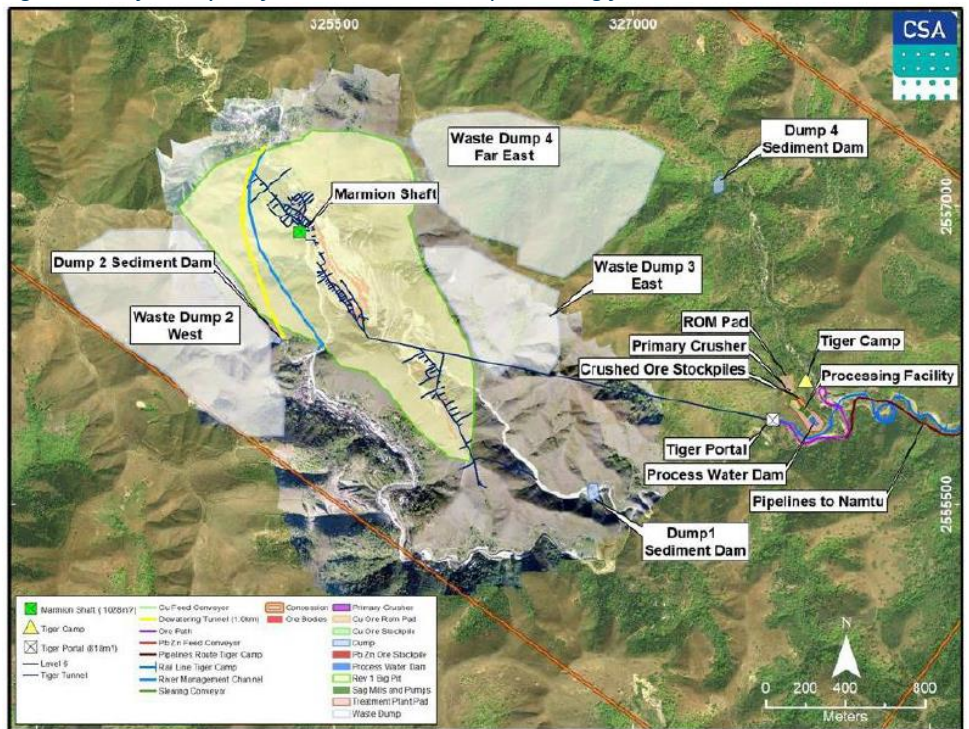
Based on the China Pit alone, we derive an undiluted \$0.28/sh valuation. However, as we believe this will be one of many mines at Bawdwin with likely processing plant expansions, our revised LOM model assumes a 25-year mine life with average throughput of 2.0Mtpa to a achieve a \$0.40/sh valuation (previously \$0.45/sh). We discount this valuation by 50% to account for development and sovereign risk to reach a \$0.20/sh target price. SPEC BUY recommendation maintained.

China Pit Scoping Study

The China Pit Scoping Study incorporates just the top of the China Lode...

MYL released a Scoping Study for the initial starter pit at the Bawdwin Project encompassing the upper mineralisation of the China Lode. The study assumes a 13-year operation processing 1.8Mt pa ore with development capex of US\$191m and operating cost of US\$84/t processed ore (delivered by road to China before royalties). Ore will be mined using conventional truck and shovel then conveyed via the established Tiger Tunnel to a crushing and screening plant at the nearby Tiger Camp. From here ore will be slurry piped to a concentrator plant in the town of Namtu.

Figure 1: Project Layout for the China Pit and processing facilities



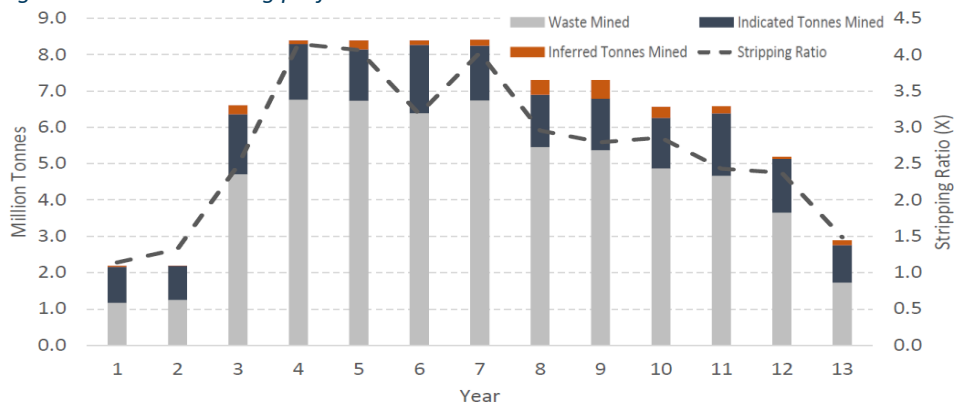
...and assumes a processing rate of 1.8Mtpa...

Source: MYL

...and a 13-year mine life...

The open pit has a low strip ratio of 2.8:1 with fresh ore from surface. Ore will have an average head grade of 9.1% Pb+Zn, 4.8oz/t Ag and 0.2% Cu. Annual production is estimated at 78ktpa Pb, 6.2Mozpa Ag, 40ktpa Zn and 2.3ktpa Cu (158ktpa Zn Eq.). The maximum mining rate will be 8.4Mtpa.

Figure 2: China Pit mining profile



...producing ~158ktpa Zn Eq.

Source: MYL

The China Pit has a low 2.8:1 strip ratio...

...with key payable metals including Pb, Ag, Zn and Cu

Development capex is estimated at US\$191m

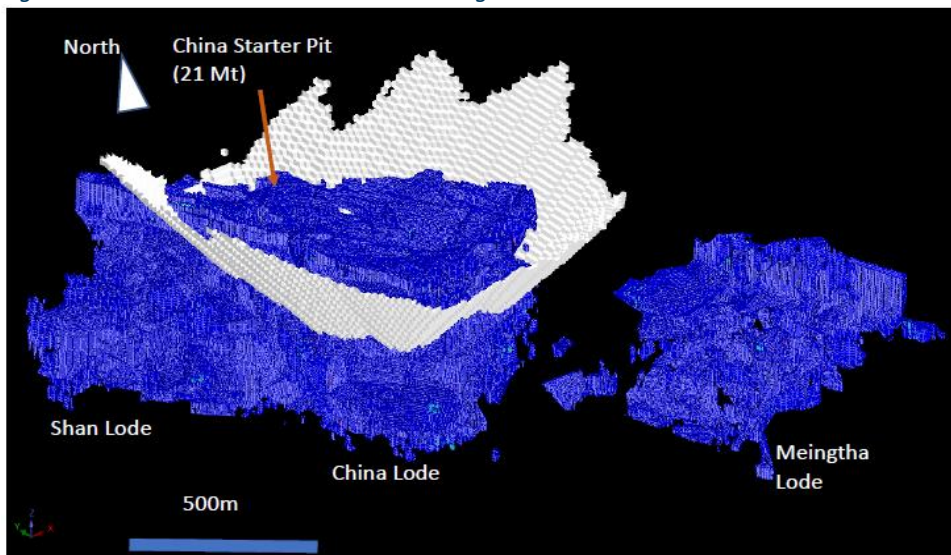
Table 1: Key assumptions and estimates for the China Pit Scoping Study

Parameters	Units	Estimated values
Mining		
Mine life (China Pit only)	Years	13
Maximum mining rate	Mtpa	8.4
Strip ratio	Ratio	2.8
Processing		
Maximum processing rate	Mtpa	1.8
Tonnes processed	Mt	21.0
Average lead grade	%	6.0
Average silver grade	g/t	149.1
Average zinc grade	%	3.1
Average copper grade	%	0.2
Metal recovered to concentrate		
Lead	kt	1,011
Silver	kOz	80,262
Zinc	kt	517
Copper	kt	30
Concentrate production		
Lead, silver, copper concentrate	kt	1,607
Zinc concentrate	kt	994
Cost estimates		
Capital expenditure	US\$ million	191
Operating costs	US\$ million	1,774

Source: MYL

The China Pit will consume just 26% of the defined Indicated and Inferred Resource, currently 82.0 Mt at 7.2% Zn+Pb, 3.8oz/t Ag and 0.2% Cu, (0.5% Pb cut-off above 750m RL, 2% Pb below 750m RL). The pit will extend ~250m below the existing surface and is intentionally limited to the constrains of the natural valley which hosts the deposit. Of the ore processed, 88% is in the Indicated Category. Drilling is underway to convert a significant portion of the residual Inferred Resources into the Indicated category, primarily within the Shan and Meingtha lodes.

Figure 3: Current Bawdwin Resource showing the Starter China Pit



The China starter pit encompasses just 26% of the defined resource

Source: MYL

Argonaut estimates US\$395m pa Revenue and US\$165m pa EBITDA on a 100% basis...

Argonaut has created a subsidiary model for the China pit. We derive average annual revenue and EBITDA of US\$395m and ~US\$165m respectively (Argonaut Est., 100% basis). Our post-tax NPV₁₂ of US\$492m (100% basis) incorporates ~20% of revenue being assigned to a Production Sharing Arrangement with the Government of Myanmar. We also apply a 25% corporate tax rate and 4% royalties. Our attributable NPV₁₂ to MYL is A\$348m or \$0.28/sh on an undiluted basis. Therefore, the starter pit alone generates a valuation greater than 4 times the current enterprise value.

Table 2: Argonaut's China Pit model summary (first 5 years of production only)

Measure	Unit	Sum / Average	Year 0	Year 1	Year 2	Year 3	Year 4	Year 5
Ore processed	Mt	21		0.9	1.1	1.6	1.8	1.8
Ore grade								
Lead	%	6.1		5.5	5.5	6.9	6.1	6.6
Zinc	%	3.2		2.7	4	4.6	2.6	3.7
Silver	g/t	153.1		166.9	178.8	183	128.2	157.9
Copper	%	0.2		0.2	0.5	0.5	0.2	0.3
Average Payability	%	91		91	91	91	91	91
Payable Lead Produced	Kt	967		100	122	222	221	239
Payable Zinc Produced	Kt	443		46	82	138	88	125
Payable Silver Produced	Koz	76,607		62	82	122	96	118
Payable Copper Produced	Kt	28		7	21	31	14	21
Total Revenue	US\$m	5,263		214	307	512	418	503
Development Capex	US\$m	-190	-120	-70				
Sustaining Capex	US\$m	-44		0	-4	-4	-4	-4
Total Operating costs	US\$m	-1764	0	-76	-92	-134	-151	-151
Royalties	US\$m	-211	0	-9	-12	-20	-17	-20
Production Sharing Agreement	US\$m	-1,053	0	-43	-61	-102	-84	-101
EBITDA	US\$m	2,236		87	141	255	167	231
D&A	US\$m	-234		-5	-10	-15	-17	-18
EBIT	US\$m	2470		93	151	270	184	249
Tax	US\$m	-617		-23	-38	-68	-46	-62
Post-Tax Free Cashflow	US\$m	1,384	-120	-6	99	184	117	165
Post-Tax Free Cashflow	A\$m	1,923	-167	-8	138	255	162	229
Post-Tax NPV ₁₂	A\$m		683					
IRR	%		62%					

And we derive a post-tax NPV₁₂ of A\$683m

Source: Argonaut, MYL Scoping Study

Beyond the China Pit

Expectations for multiple mines at Bawdwin

The limit of this Scoping Study is largely Resource confidence which is a consequence of drill density. Drilling is currently underway to increase the resource category of mineralisation in the adjacent Shan and Meingtha lodes, as well as extensions to known mineralisation. We believe both of these lodes could also support open pits from mineralisation propagating to surface, albeit smaller than the China pit. In addition to open pit mining we expect at least two underground mines to access deeper ore in the China, Shana and Meingtha lodes. The proportion of the total known resource to be incorporated in the upcoming PFS (expected Q1 2019) will be a factor of drilling success over the coming months. Better definition of deeper mineralisation, in particular Cu/Ni/Co rich lodes (see Research Note: [Sizing-up a World Class Mine](#)), may require drilling from underground positions.

The upcoming PFS will likely include the neighbouring Shan and Meingtha lodes to extend the mine life

Outside of the known resource the Bawdwin region is largely underexplored...

A regional play

Argonaut regards Bawdwin as a regional play, with the currently defined resources likely to grow once wider exploration drilling commences. To date, modern exploration including drilling, is almost non-existent beyond the known resource. In fact, the three lodes defined to date were discovered from historic underground drives and face sampling rather than drilling. MYL has embarked on an exploration program to test the 8-10km strike length of prospective geology/structures, which is littered with exposed metalliferous gossans and historic adits. It is feasible that repeats of the three known lodes will be discovered once regional drilling commences (for further detail on exploration upside please see Research Report: [Great expectations from exploration](#)).

...however numerous artisanal adits and metalliferous gossans bode well for exploration success

Figure 4: Examples of historic artisanal mining at Bawdwin



Source: Argonaut

Next steps and newsflow

Upcoming newsflow should include...

MYL will have strong newsflow over the next 6 months. Potential key reportable events include:

- Identification of regional geophysical exploration targets (from September 2018)
- Infill and extensional drill results (from mid-October 2018)
- An updated Bawdwin Resource (late-2018 to early 2019)
- Maiden Reserve and PFS (Q1 2019)
- Project permitting and regional exploration (2019)

...ongoing exploration, an updated resource and the Q1 2019 PFS

Figure 5: Project timeline for Bawdwin leading up to the PFS

Activity	Q3 2018	Q4 2018	Q1 2019	Q2 2019	Q3 2019	Q4 2019
China Pit Scoping Study	█					
2018 exploration program	█	█				
2018 resource drilling program - Shan / Meingtha		█				
Metallurgical studies			█			
Plant and logistics engineering studies			█			
Environmental and social impact assessments			█			
Mining engineering studies			█			
Offtake negotiation and project financing			█			
Resource assessment			█			
Pre-feasibility study completion			█			
Updated reserve and resource assessment			█			
2019 exploration program				█		
2019 resource drilling program				█		
Feasibility Study						█

Source: MYL

Valuation

Argonaut values MYL beyond the China Starter pit to attain a \$0.40 /valuation...

Argonaut does not value the Bawdwin asset based on this Scoping Study alone, recognising that the China Pit represents just a fraction of the exploitable resource. Our asset model incorporates a 25-year mine life and assumes processing expansions with an average throughput rate of 2.0Mtpa. We do not model any underground mining scenarios and do not account for potential nickel or cobalt extraction. We apply 70:30 debt to equity funding and assume equity capital is raised at an average \$0.08/sh post-PFS resulting in maximum shares on issue of 1,747m. We apply a 50% discount to our \$0.40/sh NAV valuation to account for development, financing and sovereign risk to achieve a \$0.20/sh target price.

...which is risk weighted 50% to achieve a \$0.20/sh target price.

Table 3: Argonaut's valuation Summary

NAV Valuation		
Sum of Parts	AUD M	AUD / Share
Bawdwin Share	492.9	0.28
Unmined Resources	186.0	0.11
Exploration Upside	100.0	0.06
Corporate NPV	(89.1)	(0.05)
Cash	15.0	0.01
Debt	-	-
Sub Total	705	0.40
Risk Weighting		50%
Target Price		0.20

Source: Argonaut

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Argonaut acted as Lead Manager to the Placement that raised \$35M in June 2018 and received fees commensurate with this service. Argonaut acted as exclusive Financial Adviser to MYL in relation to the Perilya financing. Argonaut acts as Financial Adviser to MYL and will receive fees commensurate with this service. Argonaut holds or controls 1M MYL shares and 35M MYL Options exercisable at \$0.078 on or before 15 June 2020.

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