

QUARTERLY REPORT

ASX RELEASE
31 JULY 2019

for the period ended 30 June 2019

ASX:MLM

KEY EVENTS

Exploration planning is underway at the Cape Flattery Silica Sands Project to further define the Exploration Target* of 20-100 Mt¹.

The review of the development and logistic options for the Urquhart Bauxite Project is ongoing and results are expected in the September 2019 quarter.

An initial Board review was completed into the Urquhart Bauxite Project, as well as other projects, and included administration, management, corporate costs, and development or exploration strategy².

The Company announced that the litigation with former Managing Director and CEO, Simon Slesarewich, had been resolved as part of a settlement³.

The sale of a further 6 million shares in Australian Mines Limited for a consideration of \$152,307 was completed.

An additional tenement was applied for to enhance the Esmeralda Project⁴.

\$3 million in cash is available at quarter end without any debt.



Metallica Minerals Limited an Australian resource development company, with interests in silica sands, bauxite, mineral sands, gold-copper and graphite.



CORPORATE INFORMATION

*as at 30 June 2019

CASH BALANCE*

As at 30 June 2019, MLM's cash balance was approximately \$3m

ISSUED CAPITAL*

324,047,408

Ordinary Shares

1,000,000

Unlisted Options

SHAREHOLDERS*

2,141

Shareholders

Top 20 shareholders hold 42.38%

LARGEST SHAREHOLDERS

Jien Mining Pty Ltd - 12.4%

Plan-1 Pty Ltd - 4.1%

JP Morgan Nominees

Australia - 2.47%

DIRECTORS

Theo Psaros

Non Executive Chairman

Andrew Gillies

Non Executive Director

Scott Waddell

Executive Director and Interim CEO

SENIOR MANAGEMENT

John Haley

CFO & Company Secretary



Cape Flattery silica sand dune

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DEVELOPMENT AND EXPLORATION

Metallica Minerals (ASX: MLM) (“Metallica”, “the Company”) is pleased to present its activities report for the period ended 30 June 2019.

CAPE FLATTERY

SILICA SANDS MLM INTEREST 100%

During the quarter, the Company commenced an information-gathering process to assess the status of the Cape Flattery Silica Sands Project, which is adjacent to the world class Cape Flattery Silica Sand mining and shipping operation owned by Mitsubishi.

Following this process, the Board of Directors undertook initial high-level options work, including approved planning works, to access what is required to better understand the silica sand deposit size and quality, as well as evaluate options on how a silica sand mine could be developed. The Board will continue to review the Cape Flattery Project, with the view of further progressing this project.

In April 2018, a low-cost maiden sampling program identified three target areas with silica oxide (SiO_2) percentages of greater than 99%. These target areas form the basis of an Exploration Target* of 20-100 Mt¹ of high purity silica sands,

with the insitu quality ranging between 96.9% and 99.6% SiO_2 . Cape Flattery is located in a remote part of Queensland and initial investigations show that any development at Cape Flattery is likely to require access to the existing infrastructure owned by Ports North and Cape Flattery Silica Mines Pty Ltd (a subsidiary of Mitsubishi Corporation), and/or development of other infrastructure by the Company.

According to industry research firm IMARC Group, high-purity silica sands are becoming more sought after, with the global market growing at a compound annual growth rate (CAGR) of around 6% between 2010 and 2017. In 2017, a total of 188 Mt of silica sand was produced globally.

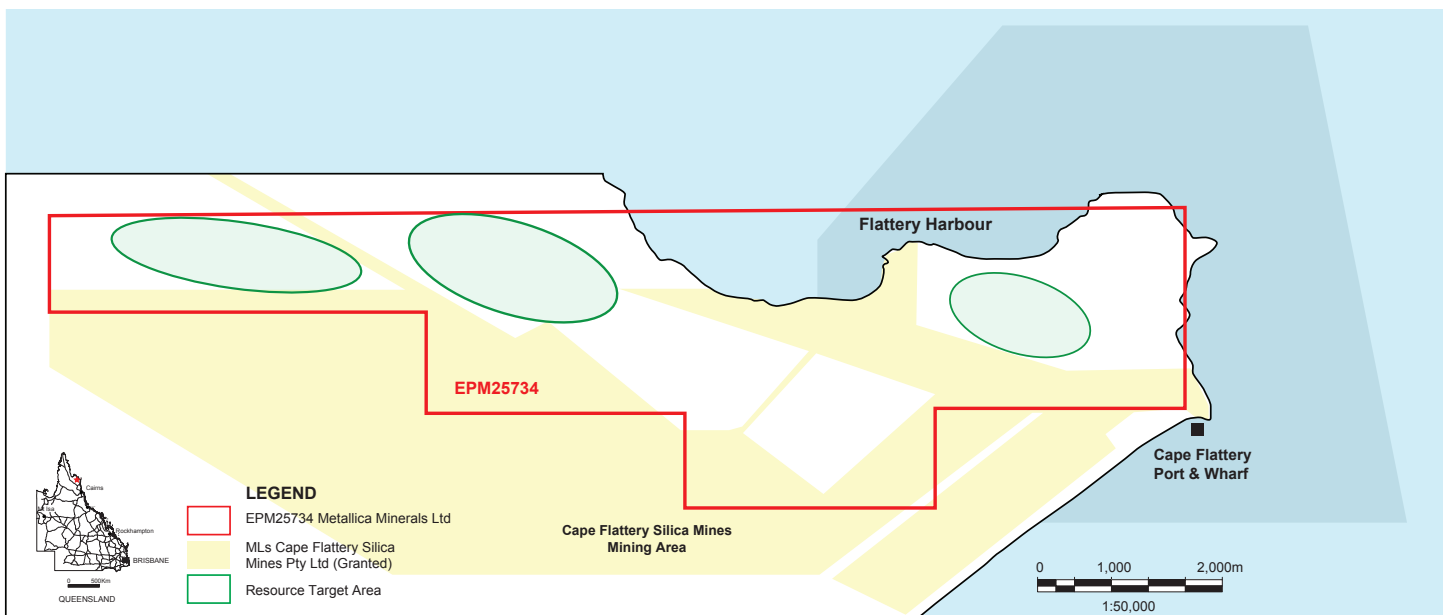
This growth has been driven by silica sand’s applications across a broad range of industries including glass-making, foundry casting, water filtration, chemicals and metals, hydraulic facturing and an increasing amount of hi-tech products, including solar panels. For example, in the global glass-making industry, one of the major consumers of high-purity silica has

experienced significant growth recently from the construction and automotive industries.

Forecasts have demand for silica sands increasing at CAGR of 7.2% through to 2022, with annual revenues reaching US\$9.6 billion.

*Exploration Target

The potential quality and grade of the Cape Flattery Silica Sand deposits are conceptual in nature. There is insufficient information at this time to define a mineral resource and there is no certainty that further exploration will result in the determination of a mineral resource in these areas.



DEVELOPMENT AND EXPLORATION

URQUHART BAUXITE

BAUXITE MLM INTEREST 50%

The Urquhart Bauxite Project is located 5 km southwest of Weipa on the western coast of the Cape York Peninsula, which is a region renowned for its extensive deposits of high-quality pisolitic bauxite. The project consists of two bauxite plateaux, known as Area A and Area B, that are wholly contained within the lease area.

The newly elected board announced on 6 February 2019⁶ that it would undertake a process of reviewing the administration, management and corporate costs, as well as the reasons for the delay in bringing Urquhart Bauxite Project's lengthy development into production.

The key findings of the review⁷ into the repeated and protracted delays are:

- MLM, via its Urquhart Bauxite Joint Venture entity, Oresome Australia, was unable to agree on the terms of a Haul Road Access Agreement until 8 November 2018. Formal negotiations commenced in or around April 2016. The agreement took approximately 2.5 years to culminate in an executed agreement.
- Oresome Australia and the owners of the Hey Point transshipment infrastructure were unable to materially advance/progress the Heads of Agreement (April 2016) into a formal detailed, legally binding contract or agree on the key terms of a Logistic Contract, specifically, the fee for service (calculated at a per tonne rate).
- The owners of the Hey Point transshipment infrastructure had not secured all the necessary approvals or completed the necessary upgrades to its infrastructure to handle the volume of

Urquhart Bauxite Project's product (in addition to its own bauxite).

- Oresome Australia did not take steps to lay the ground work to appropriately pursue in parallel other load-out options if the Hey Point option became unavailable and/or unviable.

With this review now completed, Metallica and its JV partner will continue to progress studies and designs for building a barge or ship-loading facility, including options for building on tenements that are currently owned and controlled by the Joint Venture's parties.

As previously reported, the results of these studies will not become available for some months, and a production start date cannot commence until after 2020. However, results from these new studies will be released to the ASX once they are complete.

JORC Reserve Estimate (50% Al₂O₃ cut-off)⁶

	Area	Direct shipping Bauxite (low Temp) Dry Kt	Al ₂ O ₃ %	SiO ₂ %	THA %	Low Temp RSi** %
Proved	A	2,964	53.7	12.3	42.3	5.4
Probable	A	3,568	51.9	14.2	39.1	5.9
Ore Reserve	A	6,532	52.7	13.3	40.6	5.7

* AAI - Available Alumina @ 150°C ** RSi - Reactive Silica @ 150°C

Metallica confirms all material assumptions underpinning the Resources and Reserves continue to apply and have not materially changed as per Listing Rule 5.19.2.

DEVELOPMENT AND EXPLORATION

URQUHART POINT

HEAVY MINERAL SANDS MLM INTEREST 50%

The Urquhart Point zircon and rutile HMS project is part of the Cape York Joint Venture with private Chinese investor, Ozore Resources Pty Ltd. No work was undertaken on the Urquhart Point HMS Project during the June 2019 quarter, as Metallica continued to focus on progressing the Urquhart Bauxite Project.

The Company continues to monitor zircon and rutile market prices, and entertain third-party approaches for the Urquhart Point HMS Project and its modularised and containerised HMS processing plant, which remains in storage near Brisbane. The Company's intention is to potentially realise value from the processing plant asset. An inspection of the plant was carried out during the quarter and all items remain in good condition.

CAPE YORK

REGIONAL EXPLORATION MLM INTEREST 50%

Metallica and its Joint Venture partner, Ozore Australia Pty Ltd, did not undertake any field work on regional HMS or bauxite exploration targets during the June 2019 quarter. The Joint Venture is planning a scouting exploration bauxite sampling program on a tenement in the Northern Gulf area, possibly later in 2019.

ESMERALDA

GRAPHITE, GOLD & BASE METALS MLM INTEREST 100%

As part of the ongoing review of the Esmeralda Project, a new Exploration Permit for Minerals Application EPM(A) 27210 Clara was applied for during the March quarter. Since acquiring the Clara tenement, Metallica has undertaken desktop studies to better define the previously

identified mineralisation target areas. As a result, Metallica has identified a number of additional intrusive-related gold and base metal mineralisation targets (mostly geophysical) and applied for an additional tenement EPM(A) 27290 Momba.

The new tenement, Momba, consists of 89 sub-blocks and augments Metallica's graphite, gold and base metal exploration in the region.

A target study for the Esmeralda tenements was completed in the June quarter 2019 by modelling geophysical data and this resulted in a better understanding of graphitic granites and the intrusives beneath the cover sequence. Metallica will now further review the desktop study results and plan a proposed exploration strategy based on these results.

No other exploration work was undertaken on the Esmeralda tenements during the June 2019 quarter.



Cape York HMS and Bauxite JV project area with the town of Weipa in the background

CORPORATE

LEGAL ACTION BY SUSPENDED CEO RESOLVED

On 11 June 2019, the Company announced that the litigation with former Managing Director and CEO, Simon Slesarewich, had been resolved. The terms of settlement were confidential but do not materially impact the Company.

DIRECTORS SHARE PURCHASES

Mr Theo Psaros⁹, Mr Scott Waddell¹⁰ and Mr Andrew Gillies¹¹ all purchased shares in the Company during the quarter.

DUE DILIGENCE ON WAGINA ASSET, SOLOMON ISLANDS

Due diligence activities on the advanced Wagina Bauxite Project were halted in late 2018. Negligible costs were expended by Metallica on assessing the Wagina Project in the reporting period.

Following delays to the Project's due diligence process, and a recent recommendation by the Solomon Island's Environment Advisory Committee to the Solomon Island's Environment Minister that the SWPB Development consent be revoked (Metallica understands this recommendation has been appealed against by SWBP, and the final decision now rests with the Minister), the Company is currently considering its options and evaluating whether or not to continue any funding for the Wagina Project.

ISSUED CAPITAL

As at 30 June 2019, Metallica had 324,047,408 fully paid ordinary shares and 1,000,000 unlisted options on issue.

FINANCIAL UPDATE

Metallica finished the June 2019 quarter with \$3.0 million in cash and without any debt.

SEPTEMBER 2019 QUARTER OUTLOOK

Metallica's focus for the September Quarter is to;

- Continue planning for an exploration and development program at the Cape Flattery Silica Sands tenement, including working on agreements with the local traditional owner group.
- Review development options in relation to the Urquhart Bauxite Project, including other logistics arrangements with third parties.
- Continue the application process for the exploration tenements applied for in Western Australia that target bauxite deposits, which may take some time before these tenements are granted.
- Evaluate Metallica's involvement and funding for the Wagina Project in the Solomon Islands.
- Progressing the preliminary due diligence on several new opportunities in the bauxite, energy and gold-copper commodity sectors; the Company will then update shareholders accordingly.



NOTICES

COMPETENT PERSON'S STATEMENT

URQUHART BAUXITE

The Mineral Reserve estimate and Production Target estimates were undertaken by Mr Stewart Lewis, Mining Engineer, who is a Member and Chartered Professional of the Australasian Institute of Mining and Metallurgy and the CEO of IMC Mining Pty Ltd. Mr Lewis has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Lewis consents to the inclusion of this information in the form and context in which it appears in this release/report.

The Mineral Resource estimate was undertaken by Mr John Horton, Principal Geologist, who is a Fellow and Chartered Professional of the Australasian Institute of Mining and Metallurgy and an associate at IMC Mining Pty Ltd. Mr Horton has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Horton consents to the inclusion of this information in the form and context in which it appears in this release/report.

The information in this report that relates to Exploration Results and Exploration Targets is based on information compiled by Mr John Cameron (a geologist of over 25 years' experience), and a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy and is a contract consultant to Metallica Minerals Ltd. Mr Cameron has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Cameron consents to the inclusion of this information in the form and context in which it appears in this release/report.

CAPE FLATTERY SILICA SANDS

The information in this report that relates to the Exploration Results and Targets was undertaken by Mr Neil Mackenzie-Forbes, who is a Member of the Australian Institute of Geoscientist and is a Consulting Geologist employed by Sebroy Projects Pty Ltd. Mr Neil Mackenzie-Forbes has in excess of 20 years mining and exploration experience in Australia with major mining and junior exploration companies. Mr Mackenzie-Forbes has sufficient experience that is relevant to the style of mineralisation and type of deposits under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Neil Mackenzie-Forbes consents to the inclusion of this information in the form and context in which it appears in this release/report.

CAUTION REGARDING FORWARD-LOOKING STATEMENTS

Certain statements made in this announcement contain or comprise certain forward-looking statements. Although Metallica believes that the estimates and expectations reflected in such forward-looking statements are reasonable, no assurance can be given that such expectations will prove to have been correct. Accordingly, results could differ materially from those set out in the forward-looking statements as a result of, among other factors, changes in economic and market conditions, success of business and operating initiatives, changes in the regulatory environment and other government actions, fluctuations in commodity prices and exchange rates and business and operational risk management. Metallica undertakes no obligation to update publicly or release any revisions to these forward-looking statements to reflect events or circumstances after today's date or to reflect the occurrence of unanticipated events.

FOOTNOTES

1. See ASX Release dated 18 April 2018 – "High Purity Silica Sands at Cape Flattery"
2. See ASX Release dated 12 June 2019 – "Completion and findings of Board review"
3. See ASX Release dated 11 June 2019 – "Settlement of CEO Litigation"
4. See ASX Release dated 20 May 2019 – "Momba tenement application"
5. See ASX Release dated 12 September 2018 – "Updated PFS – Urquhart Bauxite Project"
6. See ASX Release dated 6 February 2019 – "Metallica Minerals Board Review"
7. See ASX Release dated 12 June 2019 – "Completion and findings of Board review"
8. See ASX Release dated 1 March 2019 – "New Strategic tenement enhances Esmeralda Project"
9. See ASX Release dated 19 June 2019 – "Appendix 3B"
10. See ASX Release dated 19 June 2019 – "Appendix 3B"
11. See ASX Release dated 27 June 2019 and 4 July 2019 – "Appendix 3B"

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SUBSIDIARY COMPANIES

NORNICO Pty Ltd ACN 065 384 045
Oresome Australia Pty Ltd ACN 071 762 484
Oresome Bauxite Pty Ltd ACN 606 362 252
Lucky Break Operations Pty Ltd ACN 126 272 580
Phoenix Lime Pty Ltd ACN 096 355 761
Greenvale Operations Pty Ltd ACN 139 136 708
Scandium Pty Ltd ACN 138 608 894
Touchstone Resources Pty Ltd ACN 126 306 018



APPENDIX 5B

Mining Exploration Entity and Oil and Gas Exploration Entity Quarterly Report

NAME OF ENTITY: Metallica Minerals Limited

ABN: 45 076 696 092

QUARTER ENDED "current quarter": 30 June 2019

Rule +5.5

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97,
01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

Consolidated Statement of Cash Flows		Current quarter \$A'000	Year to date (12 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	7	74
1.2	Payments for		
	(a) exploration & evaluation	(36)	(100)
	(b) development	(202)	(926)
	(c) production		
	(d) staff costs	(235)	(651)
	(e) administration and corporate costs	(283)	(1,007)
1.3	Dividends received (see note 3)		
1.4	Interest received	8	59
1.5	Interest and other costs of finance paid		
1.6	Income taxes paid		
1.7	Research and development refunds		
1.8	Other (provide details if material) - Primarily corporate transaction with Melior Resources	(12)	(898)
1.9	Net cash from/(used in) operating activities	(753)	(3,449)
2.	Cash flows from investing activities		
2.1	Payments to acquire:		
	(a) property, plant and equipment		
	(b) tenements (see item 10)		
	(c) investments		
	(d) other non-current assets		
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment		
	(b) tenements (see item 10)		
	(c) investments Part of shares held in Australian Mines Limited (ASX:AUZ)	152	474
	(d) other non-current assets		
2.3	Cash flows from loans to other entities		
2.4	Dividends received (see note 3)		
2.5	Other		
2.6	Net cash from/(used in) investing activities	152	474

APPENDIX 5B

Consolidated Statement of Cash Flows		Current quarter \$A'000	Year to date (12 months) \$A'000
3.	Cash flows from financing activities		
3.1	Proceeds from issues of shares		
3.2	Proceeds from issue of convertible notes		
3.3	Proceeds from exercise of share options		
3.4	Transaction costs related to issues of shares, convertible notes or options		
3.5	Proceeds from borrowings		
3.6	Repayment of borrowings		
3.7	Transaction costs related to loans and borrowings		(50)
3.8	Dividends paid		
3.9	Other (provide details if material)		
3.10	Net cash from/(used in) financing activities	0	(50)
4.	Net increase/(decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	3,628	6,052
4.2	Net cash from/(used in) operating activities (item 1.9 above)	(753)	(3,449)
4.3	Net cash from/(used in) investing activities (item 2.6 above)	152	474
4.4	Net cash from/(used in) financing activities (item 3.10 above)	Nil	(50)
4.5	Effect of movement in exchange rates on cash held		
4.6	Cash and cash equivalents at end of period	3,027	3,027
5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	384	189
5.2	Call deposits	2,643	4,117
5.3	Bank overdrafts		
5.4	Other (provide details)		
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	3,027	4,306
		Current quarter \$A'000	
6.	Payments to directors of the entity and their associates		
6.1	Aggregate amount of payments to these parties included in item 1.2	55	
6.2	Aggregate amount of cash flow from loans to these parties included in item 2.3		
6.3	Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2		

APPENDIX 5B

		Current quarter \$A'000			
7.	Payments to related entities of the entity and their associates				
7.1	Aggregate amount of payments to these parties included in item 1.2				
7.2	Aggregate amount of cash flow from loans to these parties included in item 2.3				
7.3	Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2				
8.	Financing facilities available <i>Add notes as necessary for an understanding of the position</i>	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000		
8.1	Loan facilities				
8.2	Credit standby arrangements	Nil	Nil		
8.3	Other (please specify)				
8.4	Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.				
9.	Estimated cash outflows for next quarter Note:	\$A'000			
9.1	Exploration and evaluation	100			
9.2	Development	310			
9.3	Production				
9.4	Staff costs	120			
9.5	Administration and corporate costs	270			
9.6	Other (provide details if material) – Project Generation	10			
9.7	Total estimated cash outflows	810			
10.	Changes in tenements (items 2.1(b) and 2.2(b) above)	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1	Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced				
10.2	Interests in mining tenements and petroleum tenements acquired or increased	27290	EPMA	Nil	100%

APPENDIX 5B

COMPLIANCE STATEMENT

1. This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
2. This statement gives a true and fair view of the matters disclosed.



Sign here: Company secretary

Date: 31 July 2019

Print name: John Haley

NOTES

1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.