

METALLICA MINERALS LIMITED | ASX:MLM

QUARTERLY REPORT

SEPTEMBER 2023



CAPE
FLATTERY
SILICA

ASX RELEASE

30 September 2023 Quarterly Report

26 October 2023

Metallica Minerals is an Australian development company focused on delivering high purity silica sand to a diversified global customer-base.

ASX: MLM

Metallica Minerals Limited (ASX: MLM) (“Metallica”, “the Company”) is pleased to present its activities report for the quarterly period ended 30 September 2023.

Directors

Theo Psaros	Executive Chairman
Brad Sampson	Non-Executive Director
Mark Bojanjac	Non-Executive Director

Senior Management

Scott Waddell	CFO & Company Secretary
Nicholas Villa	GM Cape Flattery Silica Sand Project
Sam Fisher	GM Commercial

CORPORATE

AS AT 30 SEPTEMBER 2023

Issued Capital

956,898,922 Ordinary Shares
179,630,557 Listed Options
1,000,000 Unlisted Options

Shareholders

1,457 shareholders
Top 20 shareholders hold 66.9%

Largest Shareholders

Ilwella Pty Ltd - 24.2%
Sibelco Asia Pacific Pty Ltd - 16.4%
SpartagAG - 9.6%

Cash Balance

As at 30/09/2023, MLM's cash balance was approximately \$5.7m

Website

metallicaminerals.com.au



A short video presentation on our Cape Flattery Project is available on our website.

KEY EVENTS

1.

Definitive Feasibility Study for the Cape Flattery Silica Project was released in July 2023

2.

Bulk metallurgical tests confirms High Purity Silica Sand

3.

Submission lodged with Queensland Coordinator General to be considered a Coordinated Project

4.

Discussions underway with Government agencies to progress the potential for Cape Flattery to be designated a Critical Mineral Zone

5.

National Native Title Tribunal requested to mediate among Negotiation Parties

6.

Financial Statements and Annual Report to Shareholders finalised

7.

\$5.7 million in cash is available at quarter end, with no debt



DEVELOPMENT & EXPLORATION

CAPE FLATTERY SILICA SANDS

MLM
Interest
100%

The Cape Flattery Silica Project is adjacent to the world class Cape Flattery Silica Sand mining and shipping operation owned by Mitsubishi.

During the September 2023 quarter, the Company continued to advance through numerous studies, approval processes and stakeholder engagement activities that are all key components of our project development for the Cape Flattery Silica Sand Project.

In June 2023, the Queensland Premier, Annastacia Palaszczuk unveiled the Queensland Critical Minerals Strategy at the World Mining Congress in Brisbane. The Queensland Government is planning for targeted investment at Cape Flattery, as part of a new strategy to grow Queensland's critical mineral sector. Since this announcement, an initial meeting has been held with key Queensland government agencies to progress the potential for Cape Flattery to be designated a Critical Minerals Zone. Further meetings are planned.

Definitive Feasibility Study completed

The Definitive Feasibility Study (DFS) was completed on 17 July 2023 (refer ASX Release "Cape Flattery Silica DFS confirms excellent economics").

The DFS confirms potential for a long-life, low operating cost silica sand project producing high purity silica sand for use in the manufacture of solar PV glass and other applications. Turner & Townsend JukesTodd were appointed as Study Manager and had overall responsibility for the management and delivery of the DFS.

The DFS has built upon the 2022 Pre-feasibility Study (PFS) (refer ASX release 21 March 2022) and confirms the CFS Project's potential as a low-cost, long-life, high-purity silica sand operation which could achieve consistently attractive profit margins given strong current and forecast market dynamics in the Asia-Pacific region.

The highlights of the DFS are listed below:

- » The DFS forecasts life of Project cash revenue of A\$2,910M, returning pre-tax Net Present Value (nominal NPV¹⁰) of A\$437.3M, and an Internal Rate of Return (IRR) of 32.19%;
- » The initial Capital Cost of CFS is estimated to be \$165M (including a 10% contingency of \$13.6M) with a payback period from commencement of production of 2.85 years. All production is based on Ore Reserves only (refer table 4 - Ore reserves);
- » The Ore Reserves of 47 million tonnes (Mt) @ 99.18% SiO₂ (within a Mineral Resource of 49.5Mt @ 99.19% SiO₂, refer to table 5 - Mineral Resource), is to be processed over a 25-year Project life yielding high-quality silica sand of 1.5Mt per annum;
- » A purpose-built jetty is planned to be constructed (subject to Development Approval (DA)) to allow barge loading and transshipping operations. Importantly, this infrastructure is located within the Port Limit of Cape Flattery;
- » Development of CFS Project will deliver employment, apprenticeship training and new business opportunities to the Hope Vale and Cooktown communities, particularly the local Indigenous communities;
- » CFS will contribute to and benefit from the Queensland Government's Critical Minerals Strategy which supports development of 'new economy' minerals projects in Far North Queensland.

Table 1 summarises the key results of the DCF model on a pre-tax and post-tax basis. Table 2 summarises the key sand extraction and processing metrics and Table 3 presents underlying key assumptions.

Table 1: Summary of key outcomes - Definitive Feasibility study (A\$ – Australian dollars) mid 2025 AUD

Key Financial Metrics	Unit	Total
Pre-Tax Project NPV ¹⁰ (nominal)	AUD m	\$437.3
Pre-Tax Project IRR	%	32.19
Post-Tax Project NPV ¹⁰ (nominal)	AUD m	\$279.9
Post-Tax Project IRR	%	26.59
Total Silica Sales	Tonnes m	36.1
Initial Construction CAPEX	AUD m	\$165.0
Payback (no tax)	Years	2.85
LOM Revenue	AUD m	\$2,910.1
LOM C1 OPEX (excl Qld Gov't royalty)	AUD m	\$1,198.2
LOM EBITDA	AUD m	\$1,679.5
Cash Flow Pre-Tax	AUD m	\$1,341.0
C1 Cost/t product	\$/prod tonne	\$33.16
AISC/t product (including sustaining CAPEX)	\$/prod tonne	\$37.90

CAPEX pricing reflects market conditions as of Q2, 2023. The base date of the estimate is then escalated to mid-2025.

Table 2: Key Sand Extraction & Processing Metrics

	Unit	Total
Mineral Resources (see Table 4)	Tonnes M	49.5
Ore Reserve	Tonnes M	47
LOM	Years	25
Sand mined & processed	LOM Tonnes M	44.6
Silica sand production	LOM Tonnes M	36.1
Plant operating capacity	Mtpa	1.8 - 1.9
Plant yield	%	77.8 - 84.8%
Silica sand product sold	Mtpa	1.4 - 1.5

Notes

» The Probable Ore Reserve and Measured and Indicated Mineral Resource underpinning the above production assumption targets has been prepared by a Competent Person in accordance with the requirements of the JORC Code 2012 (refer Table 4 - Mineral Resources).

Table 3: Discounted cash flow financial model key assumptions

LOM assumptions	Unit	Value
Exchange rate	AUD:USD	0.72
Discount rate (nominal, unleveraged)	% p.a.	10.00
Average yield	%	81
Average sales price - real 2025	USD/prod t	\$57.92
Average sales price - real 2025	AUD/prod t	\$80.54

Table 4: Reserve Statement

Ore Reserve Category	Tonnage Mt	SiO ₂ %	Fe ₂ O ₃ %	TiO ₂ %	Al ₂ O ₃ %	LOI %	Waste Mt
Probable Reserve	47	99.11	0.09	0.14	0.15	0.24	2.6

Table 5: Mineral Resource for the Cape Flattery Silica Project

Resource Category	Silica Sand Mt	SiO ₂ %	Fe ₂ O ₃ %	TiO ₂ %	LOI %	Al ₂ O ₃ %	Density t/m ³	Silica Sand Mm ³
Measured	16.1	99.20	0.08	0.12	0.13	0.22	1.6	10.1
Indicated	33.2	99.05	0.10	0.18	0.15	0.25	1.6	20.7
Inferred	0.2	99.00	0.12	0.27	0.13	0.28	1.6	0.1
Total	49.5	99.10	0.09	0.16	0.14	0.24	1.6	30.9

For further details, refer to ASX Release: 7 April 2022: “Significant Increase in Measured and Indicated Resources at Cape Flattery Silica Project”.

Coordinated Project Submission

The Company lodged a submission with the Office of Coordinator General in Queensland in September 2023. The submission seeks approval for up to 4mtpa of production at the CFS Project. While this is a material increase on the forecast production of 1.8mtpa used as the basis for the DFS released in July 2023 (see ASX release 17 July 2023: Cape Flattery Silica DFS Confirms Excellent Economics), our current production target remains 1.8mtpa. The application for up to 4mtpa provides optionality for the project, subject to capital markets and importantly, demand from potential customers. In seeking approval for the larger production rate, we negate having to initiate a new application in the future.

The Coordinator General manages the project assessment process, which includes working with advisory agencies, local government and other organisations to seek input on the environmental impact statement (EIS) and on post-EIS statutory approvals; coordinating public submissions on the EIS and other documentation; and preparing a final evaluation report on the project. A ‘coordinated project’ declaration does not imply government approval of support for or commitment to the project.

A decision from the Office of Coordinator General is expected in Q4 2023.

Environmental Impact Statement

The final Guidelines for the EIS will be subject to the decision by the Office of Coordinator General on the submission outlined above. However, there are many components of the EIS that are standard components and accordingly those studies have started.

Requests for Proposal have been issued to consultants to manage the EIS and more specifically, undertake the Economic Impact Assessment and Social Impact Assessment. This work will commence shortly. The respective scope of work for these components of the EIS will be updated when final Guidelines/Terms of Reference for the EIS are agreed with the Queensland and Commonwealth Governments.

Federal Environmental Approval process

During the December 2022 quarter, the Company submitted a Referral under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) for the Cape Flattery Silica Sand Project. The Federal Department of Climate Change, Energy, the Environment and Water (DCCEEW) assessed the Referral and on 18 January 2023 determined that the CFS project is a Controlled Action under Section 75 of the EPBC Act requiring assessment and approval under the EPBC Act prior to final approval.

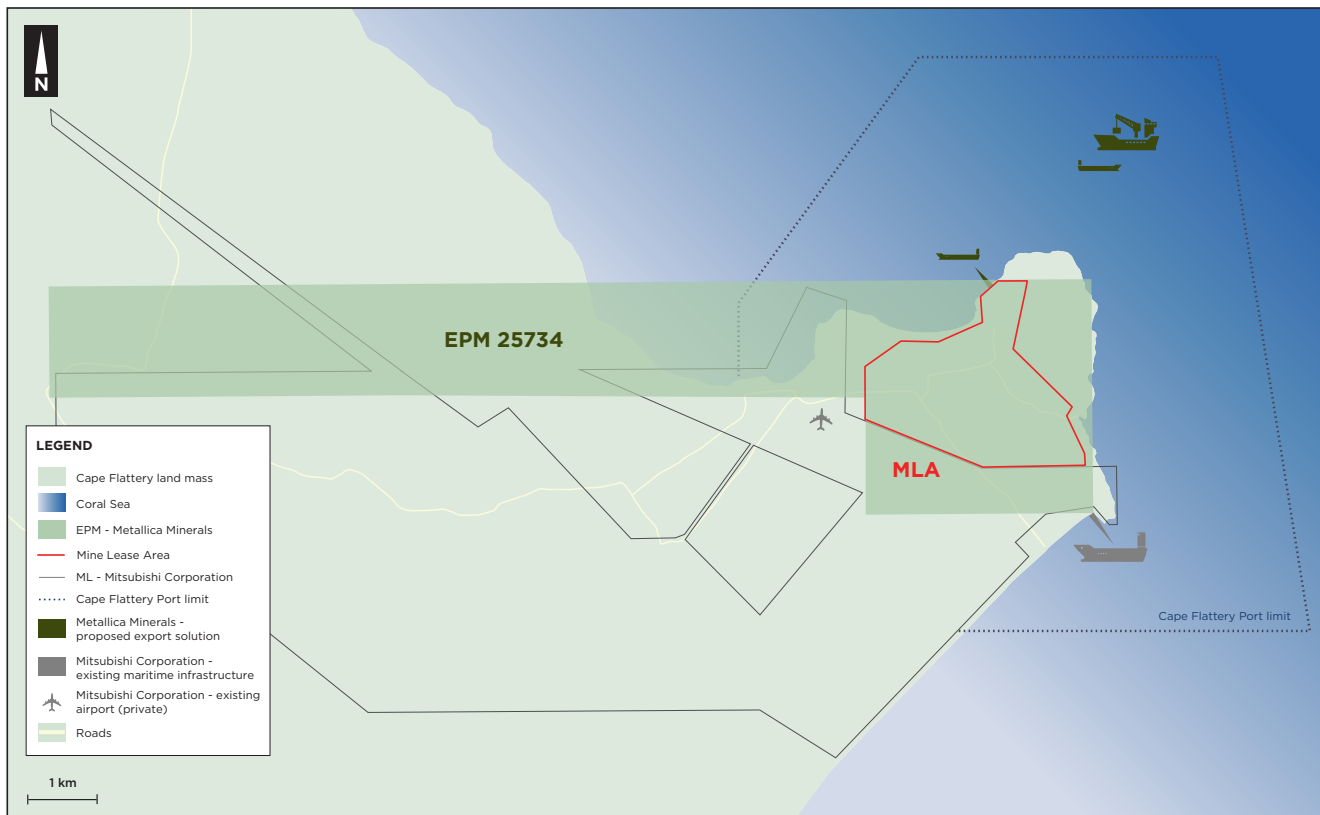


Figure 1: Metallica Minerals’ CFS EPM 25734 & MLA location adjacent to the Cape Flattery Port Limit and proximity of MLA area to the planned purpose-built jetty

On 20 February 2023, DCCEEW announced that the assessment will be through an Environmental Impact Statement (EIS).

A draft Guidelines for the EIS was issued by DCCEEW in May 2023 and a further draft of the Guidelines has been issued following a meeting with DCCEEW in Canberra. To date significant environmental studies have been undertaken by CFS and these studies which will be used towards the requirements for the EIS.

The Company is waiting for confirmation that the Federal process will run bilaterally with the Office of Coordinator General leading the process.

The lodgement of the Environmental Application and Progressive Rehabilitation and Closure Plan (PRCP) with Queensland Department of Environment and Science (DES) has been delayed while the Company waits to receive the final Guidelines for the EIS from the Federal Department of Climate Change, Energy the Environment and Water.

Traditional Landowner update

A negotiation meeting was held during the September 2023 Quarter in Hope Vale between CFS Project representatives, representatives of the native title holders for the shared area (Dingaal and Nguurruumungu Clans) and the Board of Hopevale Congress Aboriginal Corporation (trustee landholder and agent registered native title body corporate for the Nguurruumungu Clan).

The challenges of seeking a unified response to the outstanding matters has resulted in Metallica requesting the assistance of the National Native Title Tribunal to mediate among the Negotiation Parties - being the Dingaal and Nguurruumungu Clans, the State of Queensland and Metallica’s subsidiary Cape Flattery Silica Pty Ltd to assist in obtaining their agreement for the grant of mining lease 100284. The benefit of mediation is that it will assist the parties to work together to seek a common focus for the negotiation process. There are outstanding matters that could be best resolved under a more formal process.

The Company has been meeting with the two clans since October 2020 and formally negotiating since November 2021. To date we have held seven meetings with the Negotiation representatives which have been held in a professional and respectful manner. The mediation process will assist the parties to reaching a mutually beneficial outcome.

Potential Offtake partners

Following the visit by Metallica’s Commercial GM, Sam Fisher, to China in July 2023, interest from potential offtake parties has continued and a second visit to China has been undertaken in October 2023. Meetings will also be held in Taiwan later in the year. Discussions continue with interested groups in South Korea and Japan.

Metallurgical Test Work

The results of the latest phase of metallurgical studies was announced on 19 September 2023. The bulk metallurgical testing of an approximately 600 kilogram sample acquired from the August and December 2021 drilling programs has verified the process flow design used in the DFS and produced a high purity silica sand product via simple processing methods.

The metallurgical testing was completed by Mineral Technologies at their Carrara laboratory in Queensland using spirals, attritioning, particle classification and magnetic separation. The product produced contained 99.9% SiO₂, 100ppm Fe₂O₃, 340ppm Al₂O₃, 200ppm TiO₂ whilst holding a mass yield of over 85%. The yield result supports the conservative average yield estimate of 81% used in the DFS. Particle size distribution was excellent with 98.15% of final product between 600 and 106 micron with a D50 of 218 micron. Direct engagement with the world’s largest glass manufacturers in north Asia has confirmed this product quality is suitable for manufacture of solar PV glass, amongst other applications.

The focus of the CFS Project remains supplying product to higher value markets such as solar PV glass manufacturers. Potential exists for Metallica to market products derived from earlier processing streams with higher yield and lower quality, such as the spiral circuit product. These options will be firmed up through further engagement with customers, and engineering studies.

The mass yield and product quality of each option is summarised in Table 6 below.

Table 6: Potential product options (UCC - up-current classifier, WHIMS - wet high intensity magnetic separation)

Potential Product Options	Mass Yield %	Assay				
		SiO ₂ %	Al ₂ O ₃ %	Fe ₂ O ₃ %	TiO ₂ %	LOI 1000 %
Spiral product	91.9	99.9	0.041	0.012	0.025	0.07
Attrition product and UCC	90.0	99.9	0.038	0.011	0.021	0.04
WHIMS non-magnetic product	85.6	99.9	0.034	0.010	0.020	0.03

Several high-resolution microscopic images were taken of the final non-mag product. An example is included below.

Figure 2: high-resolution microscopic image of the final non-mag CFS product



Hot Acid Leach (HAL)

Metallica will not be considering the use of HAL at the project site. A HAL test was completed on a sub-sample of the WHIMS non-magnetic product to evaluate the potential improvement in product quality that maybe achieved by partners located overseas. Multiple samples of the product were submitted for assay with the results in table 7 below. The results indicate improved quality and value uplift can be achieved with further processing and this may be attractive to some future purchasers of the CFS silica sand product.

Table 7: Hot Acid Leach product

Potential Product Options	Mass Yield %	Assay				
		SiO ₂ %	Al ₂ O ₃ %	Fe ₂ O ₃ %	TiO ₂ %	LOI 1000 %
HAL product	99.6	99.9	0.032	0.007	0.017	0.04

Particle size distribution (PSD)

PSD was attractive in a narrow range and did not vary markedly for any stage of the process. PSD and assay for final non-magnetic WHIMS product is in table 8 below. A narrow PSD is important for glass manufacturers as it improves furnace efficiency due to particles melting at a uniform rate.

Table 8: Particle size distribution and assay - T300 Final Non-mag WHIMS Product

Sieve size retained (µm)	% Distribution	Assay (%)										
		SiO ₂	Fe ₂ O ₃	TiO ₂	Al ₂ O ₃	Cr ₂ O ₃	CaO	Cu	K ₂ O	MgO	Na ₂ O	LOI ₁₀₀₀
600	0.33	99.9	0.008	0.021	0.026	3	0.004	<0.001	0.001	0.001	<0.001	0.070
425	7.03	99.9	0.008	0.021	0.026	3	0.004	<0.001	0.001	0.001	<0.001	0.070
300	18.0	99.9	0.009	0.019	0.028	3	0.004	<0.001	0.001	0.001	0.001	0.040
212	27.5	99.9	0.010	0.018	0.033	3	0.004	<0.001	0.002	0.001	0.002	0.050
150	29.3	99.9	0.010	0.019	0.038	3	0.004	<0.001	0.002	0.001	0.002	0.060
106	16.4	99.8	0.012	0.024	0.043	2	0.004	<0.001	0.002	0.002	0.003	0.060
	1.52											
Feed (total)	100.0	99.9	0.010	0.020	0.035	3	0.004	0	0.002	0.001	0.002	0.054

Further details of the Metallurgical test work results can be found in ASX Announcement dates 19 September 2023, “Bulk Metallurgical tests confirm High Purity Silica Sand at Cape Flattery”.

SILICA SAND

Sand is the world's most consumed raw material after water and an essential ingredient to our everyday lives. Yet, the world is facing a shortage — and climate scientists say it constitutes one of the greatest sustainability challenges of the 21st century.

For construction alone the world consumes roughly 40 - 50 billion tons of sand on an annual basis. That's enough to build a wall of 27 meters high by 27m wide that wraps around the planet every year.

The global rate of sand use which tripled over the past two decades partially as a result of surging urbanisation - far exceeds the natural rate at which sand is being replenished by the weathering of rocks by wind and water.

Sand is the worlds most consumed raw material after water and an essential ingredient to our everyday lives.

Source: A sand shortage? The world is running out of a crucial — but under-appreciated — commodity <https://www.cnbc.com/2021/03/05/sand-shortage-the-world-is-running-out-of-a-crucial-commodity.html>

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 fracturing and an increasing number 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. IMARC also estimated the global silica sand market could grow from US\$7 billion to US\$20 billion in 2024.

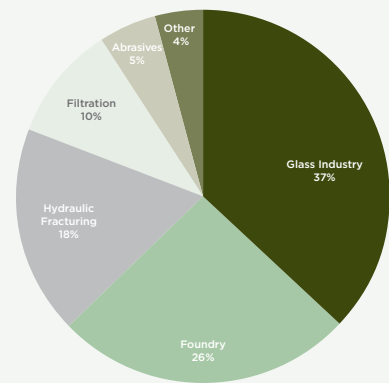
Source: www.imarcgroup.com/silica-sand-manufacturing-plant

Silica Sand Uses and Future Demand

Silica sand is the key ingredient in construction glass and the glass for vehicle windscreens. Demand from the renewable energy sector continues to rise driven by solar panel manufacturers.

Growing Markets - Ultra Clean Glass

- » Solar panels
- » Smartphones
- » Fibre optics
- » Tablets
- » LED lighting



- » The global silica sand market was valued at US\$ 21.6 Billion in 2021.
- » Global silica sand market to exhibit a CAGR of 6% during 2022-2027.
- » Solar PV capacity has grown 20 fold over the past decade and forecast to triple in size over the next 10 years.



CLERMONT COPPER-GOLD

**Transitioning to 51% PGE Minerals Pty Ltd
a 100% owned subsidiary of Metallica
Minerals Limited**

MoU Diatreme Resources Pty Ltd

On 5 August 2021, the Company announced it had signed a Memorandum of Understanding (MoU) with Diatreme Resources for a potential Joint Venture on the Clermont Project which comprises of EPM 17968.

On 29 April 2022, the Company confirmed that it has met the expenditure commitment to earn 25% of the project. In addition, the Company increased its share to 51% of the project as announced on 4 July 2023 (see ASX release: "Further drilling completed at Clermont (EPM17968)"). The drilling completed in Quarter 2 2023 did not intersect the copper porphyry target, and no further major expenditure is expected to be made on a porphyry target on the tenement.

During the September 2023 Quarter, the Company identified that historical drill holes on the Leo Grande prospect (which is part of the tenement area) had identified a zone of graphite intersections on the drill log. The drilling targeted a historical gold prospect, with the drilling completed in 1989 and 1990. Graphite mineralisation was visually recorded in all 54 holes, with graphite present in the mylonite or the graphitic quartz - mica schist. No assays for graphite mineralisation were recorded or available in the historical data.

Further work (including possible field work) is currently being planned for the December 2023 Quarter to assess the graphite mineralisation potential of the Leo Grande prospect.

During the September 2023 Quarter, the Company elected to submit a Sole Fund Election to Diatreme Resources Pty Ltd, whereby Metallica will sole fund the next \$1m of JV expenditure on the Clermont tenement in return for Metallica obtaining a further 24% ownership of the Clermont tenement (and JV).





CORPORATE

The 2023 Annual Report for the Company was lodged on the ASX on 11 October 2023 and the Annual Financial Statements for the full year to 30 June 2023 were lodged on 7 September 2023.

The Annual General Meeting for the Company is being held on 22 November 2023 at 9:30am at the offices of HWL Ebsworth, Level 19, 480 Queen Street, Brisbane. The Notice of Annual General Meeting and Explanatory Memorandum was lodged on 11 October 2023.

Financial and Cashflow Update For the Quarter

Attached to this report is the Appendix 5B containing the Company's cash flow statement for the September 2023 Quarter. The significant cash outflows during the quarter include \$914k in relation to expenses for exploration and evaluation that were capitalised. These capitalised expenses included the following key activities:

- » Consultants and contractors that were engaged on completing the DFS;
- » Traditional landowner negotiation meetings;
- » Completing metallurgical studies; and
- » Approvals and environmental activities.

Cash inflows for the quarter were \$55k which related to interest payments.

Metallica ended the September 2023 quarter with \$5.7 million in cash and without any debt.

Pursuant to ASX LR4.7C.1 and as outlined in the Appendix 5B, the aggregate amount paid to related parties and their associates of \$110k represents Director fees and the Executive Chairman salary. These payments relate to the existing remuneration agreements for the Executive and Non-Executive Directors.

Stay Connected

We encourage Shareholders and other interested parties to sign up to our email database to receive updates direct from the Company. This can be done via the Contact Us page on our website.

September 2023 Quarter Outlook

Metallica's focus for the December 2023 Quarter is to:

- » Continue to work with the Office of Coordinator General to be considered a Coordinated Project;
- » Optimise a number of aspects of the DFS completed on 17 July 2023;
- » Advance the EIS with the Federal Department of Climate Change Energy Environment and Water (note - significant environmental studies are already complete);
- » Commence Economic Impact Assessment and Social Impact Assessment for the Cape Flattery Silica Project;
- » Continue discussions with the Queensland Government to progress the potential for Cape Flattery to be designated a Critical Minerals Zone;
- » Progress studies on options to build a barge-loading facility to tranship silica product onto Ocean-Going Vessels;
- » Commence the process with the National Native Title Tribunal for mediation among the Negotiation Parties;
- » Continue an assessment on the silica sand market and potential for establishing customer off-take agreements; and
- » Complete further work at Clermont to further define the graphite target.



Interest In Mining Tenements At the End of the Quarter

This section provides information required under ASX listing rule 5.3.3 for mineral exploration entities.

State	Tenement Name	Tenement ID	Status	Location	Interest	Holder
QLD	Cape Flattery Silica	EPM 25734	Granted	Cape Flattery	100%	Cape Flattery Silica Pty Ltd
QLD	Cape Flattery Silica	ML 100284	Application	Cape Flattery	100%	Cape Flattery Silica Pty Ltd
QLD	Clermont Copper Gold	EPM 17968	Granted	Clermont	51%	PGE Minerals Pty Ltd

Table as at 30 September 2023.

This announcement has been authorised by the Board of Metallica Minerals Limited.



NOTICES

COMPETENT PERSON STATEMENTS

Clermont and Cape Flattery Silica Sands Exploration Results

The information in this report that relates to the Exploration Sampling and Exploration Results is based on information compiled by Mr Patrick Smith, a Competent Person who is a Member of the Australian Institute of Mining and Metallurgy.

Mr Smith is the owner and sole Director of PSGS Pty Ltd and is contracted to Metallica Minerals as their Exploration Manager. Mr Smith confirms there is no potential for a conflict of interest in acting as the Competent Person. Mr Smith 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 Smith consents to the inclusion of this information in the form and context in which it appears in this release/report.

Cape Flattery Silica Sands Mineral Resource and Reserve

The information in this report that relates to the Cape Flattery Silica Project – Eastern Resource Area is based on information and modelling carried out by Chris Ainslie, Project Engineer, who is a full-time employee of Ausrocks Pty Ltd and a Member of the Australasian Institute of Mining & Metallurgy.

The work was supervised by Mr Carl Morandy, Mining Engineer who is Managing Director of Ausrocks Pty Ltd and a Member of the Australasian Institute of Mining & Metallurgy and also by Mr Brice Mutton who is a Senior Associate Geologist for Ausrocks Pty Ltd. Mr Mutton is a Fellow of the Australasian Institute of Mining & Metallurgy and a Fellow of the Australian Institute of Geoscientists. Mr Morandy and Mr Ainslie and Mr Mutton are employed by Ausrocks Pty Ltd who have been engaged by Metallica Minerals Ltd to prepare this independent report, there is no conflict of interest between the parties. Mr Morandy, Mr Ainslie and Mutton consent to the disclosure of information in the form and context in which it appears in this report.

The overall resource work for the Cape Flattery Silica Project – Eastern Resource Area is based on the direction and supervision of Mr Mutton who 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".

REFERENCE TO PREVIOUS RELEASES

Reserve figures of this announcement have been previously reported to the market in the report dated 21 March 2022.

Drilling, resource estimates and metallurgical results referred to in this announcement have been previously announced to the market in reports dated; 7 April 2022, 12 August 2021, 15 June 2021, 22 June 2021, and 2 March 2021 and are available to view and download from the Company's website: ASX Announcements – Metallica Minerals Limited

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. MLM confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.

FORWARD-LOOKING STATEMENTS

Forward-looking statements are based on assumptions regarding Metallica, business strategies, plans and objectives of the Company for future operations and development and the environment in which Metallica may operate.

Forward-looking statements are based on current views, expectations and beliefs as at the date they are expressed and which are subject to various risks and uncertainties. Actual results, performance or achievements of Metallica could be materially different from those expressed in, or implied by, these forward-looking statements. The forward-looking statements contained in this presentation are not guarantees or assurances of future performance and involve known and unknown risks, uncertainties and other factors, many of which are beyond the control of Metallica, which may cause the actual results, performance or achievements of Metallica to differ materially from those expressed or implied by the forward-looking statements. For example, the factors that are likely to affect the results of Metallica include general economic conditions in Australia and globally; ability for Metallica to fund its activities; exchange rates; production levels or rates; demand for Metallica's products, competition in the markets in which Metallica does and will operate; and the inherent regulatory risks in the businesses of Metallica. Given these uncertainties, readers are cautioned to not place undue reliance on such forward-looking statements.

Appendix 5B

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Name of entity

Metallica Minerals Limited

ABN

45 076 696 092

Quarter ended ("current quarter")

30 September 2023

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
1. Cash flows from operating activities		
1.1 Receipts from customers		
1.2 Payments for		
(a) exploration & evaluation (if expensed)	-23	-23
(b) development		
(c) production		
(d) staff costs	-327	-327
(e) administration and corporate costs	-229	-229
1.3 Dividends received (see note 3)		
1.4 Interest received	55	55
1.5 Interest and other costs of finance paid		
1.6 Income taxes paid		
1.7 Government grants and tax incentives		
1.8 Other (provide details if material)		
1.9 Net cash from / (used in) operating activities	-523	-523
2. Cash flows from investing activities		
2.1 Payments to acquire:		
(a) entities		
(b) tenements		
(c) property, plant and equipment		
(d) exploration & evaluation (if capitalised)	-914	-914
(e) investments		
(f) other non-current assets		
2.2 Proceeds from the disposal of:		
(a) entities		
(b) tenements		

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Consolidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
(c) property, plant and equipment		
(d) investments		
(e) other non-current assets		
2.3 Cash flows from loans to other entities		
2.4 Dividends received (see note 3)		
2.5 Other (provide details if material)		
2.6 Net cash from / (used in) investing activities	-914	-914

3. Cash flows from financing activities		
3.1 Proceeds from issues of equity securities (excluding convertible debt securities)		
3.2 Proceeds from issue of convertible debt securities		
3.3 Proceeds from exercise of options		
3.4 Transaction costs related to issues of equity securities or convertible debt securities		
3.5 Proceeds from borrowings		
3.6 Repayment of borrowings		
3.7 Transaction costs related to loans and borrowings		
3.8 Dividends paid		
3.9 Other (provide details if material)		
3.10 Net cash from / (used in) financing activities	0	0

4. Net increase / (decrease) in cash and cash equivalents for the period		
4.1 Cash and cash equivalents at beginning of period	7,107	7,107
4.2 Net cash from / (used in) operating activities (item 1.9 above)	-523	-523
4.3 Net cash from / (used in) investing activities (item 2.6 above)	-914	-914
4.4 Net cash from / (used in) financing activities (item 3.10 above)		
4.5 Effect of movement in exchange rates on cash held		
4.6 Cash and cash equivalents at end of period	5,670	5,670

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

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	2,079	3,516
5.2 Call deposits	3,591	3,591
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)	5,670	7,107

6. Payments to related parties of the entity and their associates

- 6.1 Aggregate amount of payments to related parties and their associates included in item 1 *
- 6.2 Aggregate amount of payments to related parties and their associates included in item 2

**Current quarter
\$A'000**

110

Note: if any amounts are shown in items 6.1 or 6.2, your quarterly activity report must include a description of, and an explanation for, such payments

7. Financing facilities

Note: the term 'facility' includes all forms of financing arrangements available to the entity.

Add notes as necessary for an understanding of the sources of finance available to the entity.

- 7.1 Loan facilities
- 7.2 Credit standby arrangements
- 7.3 Other (please specify)
- 7.4 **Total financing facilities**

**Total facility
amount at quarter
end
\$A'000****Amount drawn at
quarter end
\$A'000****7.5 Unused financing facilities available at quarter end**

- 7.6 Include in the box below a description of each facility above, including the lender, interest rate, maturity date and whether it is secured or unsecured. If any additional financing facilities have been entered into or are proposed to be entered into after quarter end, include a note providing details of those facilities as well.

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

8. Estimated cash available for future operating activities	\$A'000
8.1 Net cash from / (used in) operating activities (Item 1.9)	-523
8.2 Capitalised exploration & evaluation (Item 2.1(d))	-914
8.3 Total relevant outgoings (Item 8.1 + Item 8.2)	-1,437
8.4 Cash and cash equivalents at quarter end (Item 4.6)	5,670
8.5 Unused finance facilities available at quarter end (Item 7.5)	0
8.6 Total available funding (Item 8.4 + Item 8.5)	5,670
8.7 Estimated quarters of funding available (Item 8.6 divided by Item 8.3)	4

Note: if the entity has reported positive relevant outgoings (ie a net cash inflow) in item 8.3, answer item 8.7 as "N/A". Otherwise, a figure for the estimated quarters of funding available must be included in item 8.7.

8.8 If Item 8.7 is less than 2 quarters, please provide answers to the following questions:

1. Does the entity expect that it will continue to have the current level of net operating cash flows for the time being and, if not, why not?

Answer: N/A

2. Has the entity taken any steps, or does it propose to take any steps, to raise further cash to fund its operations and, if so, what are those steps and how likely does it believe that they will be successful?

Answer: N/A

3. Does the entity expect to be able to continue its operations and to meet its business objectives and, if so, on what basis?

Answer: N/A

Note: where item 8.7 is less than 2 quarters, all of questions 8.8.1, 8.8.2 and 8.8.3 above must be answered.

Compliance statement

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

26 October 2023

Date:

Authorised by: By the Board of Directors
.....

Notes

- This quarterly cash flow report and the accompanying activity report provide a basis for informing the market about the entity's activities for the past quarter, how they have been financed and the effect this has had on its cash position. An entity that wishes to disclose additional information over and above the minimum required under the Listing Rules is encouraged to do so.
- If this quarterly cash flow 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*

Mining exploration entity or oil and gas exploration entity quarterly cash flow report

Flows apply to this report. If this quarterly cash flow 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.
4. If this report has been authorised for release to the market by your board of directors, you can insert here: "By the board". If it has been authorised for release to the market by a committee of your board of directors, you can insert here: "By the [*name of board committee – eg Audit and Risk Committee*]". If it has been authorised for release to the market by a disclosure committee, you can insert here: "By the Disclosure Committee".
5. If this report has been authorised for release to the market by your board of directors and you wish to hold yourself out as complying with recommendation 4.2 of the ASX Corporate Governance Council's *Corporate Governance Principles and Recommendations*, the board should have received a declaration from its CEO and CFO that, in their opinion, the financial records of the entity have been properly maintained, that this report complies with the appropriate accounting standards and gives a true and fair view of the cash flows of the entity, and that their opinion has been formed on the basis of a sound system of risk management and internal control which is operating effectively.