

ASX ANNOUNCEMENT

26 October 2023

FIRST QUARTER ACTIVITIES – FY 2024

Cassius Mining Limited (“Cassius” or the “Company”) (ASX Code: CMD) is pleased to provide shareholders with the Company’s Activities Report and Appendix 5B for the quarter ending **30 September 2023**.

SOALARA LIMESTONE PROJECT, MADAGASCAR

During Q1 the Company announced its inaugural JORC 2012 Mineral Resource Estimate of:

- 95 to 130 Million tonnes of “Very High”¹ 98.6% Limestone purity at a 97.5% CaCO₃ (Calcium Carbonate) cut-off, depending on a bulk or selective mining application:
 - 25-40 Mt in the Indicated category, plus
 - 70-90 Mt in the Inferred category
- or, 340 to 440 Million tonnes of “High” 97% Limestone purity at a 95.7-95.3% CaCO₃ (Calcium Carbonate) cut-off, depending on a bulk or selective mining application:
 - 100-130 Mt in the Indicated category, plus
 - 240-310 Mt in the Inferred category

Selective coring under discussion to further delineate the Resource to add value, while simultaneously reviewing options for bringing forward development sooner than previously considered.

CEO James Arkoudis:

“We are delighted our two drilling campaigns at the Soalara Limestone Project have been so successful, leading to an upgrade from the previous JORC 2012 Exploration Target of 491 to 818 Mt of Limestone with a purity of “High” to “Very High” to the current substantial JORC 2012 Mineral Resource of 340 to 440 Mt with a purity of “High” to “Very High”, with only 9 of 26 potential holes cored to date.

The elevated purity level (and tonnage) of Limestone in the Resource has confirmed a high quality end use is achievable, beyond just basic industrial applications. It has given an increased economic confidence in the asset, particularly as the Limestone is present from surface, flat bedded with simple geology and laterally consistent.

A number of pathways forward for the Company have now been opened, including further coring to increase the Resource’s size and confidence through staged operational phases, as the full coring programme allows up to 26 holes. However the Company is also simultaneously reviewing its options and requirements to pursue earlier than later development, including via future discussion with potential JV partners.”

¹ Cox/Bridge/Hull (1977) & Mitchell Limestone Purity (2011) Classifications (**Table 1**)

9 holes were vertically cored in two phases for ~900m (**Table 1**), as in the overall grid of up to 26 holes (**Fig 1**):



Fig 1: Soalara Phase 1 (red) and Phase 2 holes (green) with all-weather access in white

Limestone classification	CaO (wt%)	CaCO ₃ (wt %)
100% limestone	56.03	100.0
Very high purity	> 55.2	> 98.5
High purity	54.3 - 55.2	97.0 - 98.5
Medium purity	52.4 - 54.3	93.5 - 97.0
Low purity	47.6 - 52.4	85.0 - 93.5
Impure	< 47.6	< 85.0

Table 1: MITCHELL Classification - Pure Limestone is 56.03% CaO (Calcium Oxide), 100% CaCO₃ (Calcium Carbonate)

Examples of the “High” and “Very” purity Limestone cored are shown in **Figs 2-3**.

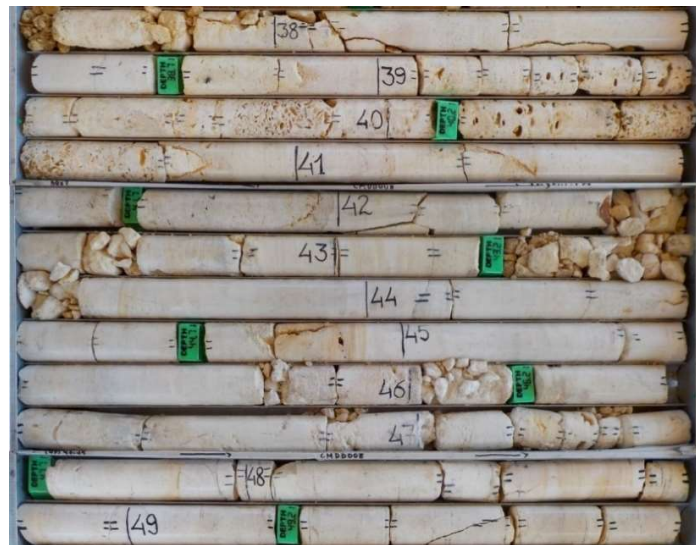


Fig 2 - VERY HIGH purity Limestone (CMDD008) from 37.88 to 49.53m, with weighted average 99.29% CaCO_3



Fig 3 – “HIGH” purity core (CMDD003), 8.00 to 21.30m, weighted average 54.92% CaO (98.04% CaCO_3 Limestone)

About the SOALARA LIMESTONE PROJECT

Soalara’s deposit is a horizontal sequence of Limestones, overburden free and open at 100m in all 9 holes cored. It holds a JORC Mineral Resource of 340-440 Mt of Limestone with a purity of “High” to “Very High” (97-98.6% pure Limestone) in the Indicated and Inferred categories, depending on a bulk or selective mining application:

- 95-130 Mt of “Very High” 98.6% Limestone purity at 97.5% CaCO_3 cut-off (Calcium Carbonate), depending on bulk or selective mining application, with 25-40 Mt (Indicated) and 70-90 Mt (Inferred) or,
- 340-440 Mt of “High” 97% Limestone purity at 95.7-95.3% CaCO_3 cut-off (Calcium Carbonate), depending on bulk or selective mining applications, with 100-130 Mt (Indicated) and 240-310 Mt (Inferred)

The lateral Limestone purity continuity and simple flat-bedded geology confirms suitability to open pit mining.

CHENENE LITHIUM PROJECT, TANZANIA

The Company is reviewing preferred forward operations (targeted trenching and/or shallow drilling on Target 1, and rock chip sampling on Target 2) on the twin targets in its 4 contiguous Lithium exploration licenses (**Fig 4**) in central Tanzania. The main Target 1 at Dulu in PL 11921 has recently been confirmed as hosting Lithium-bearing pegmatites, along with significant associated Caesium and Tantalum.

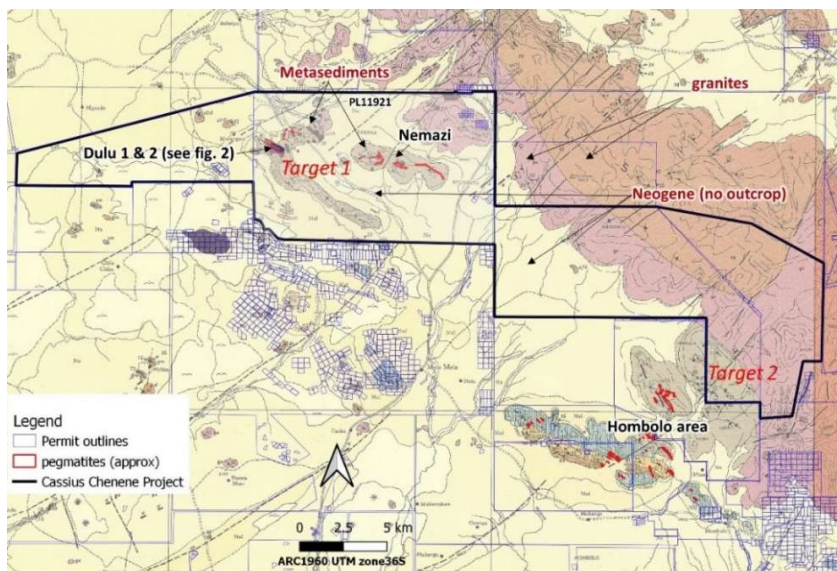


Fig 4: Targets 1 and 2 in the Chenene Lithium Project (300 km²), with pegmatites in red

A 950m long “Dulu 1” pegmatite (**Fig 5**) assayed to 1.08% Lithium (as Li₂O) in the Company’s PL 11921, where Caesium and Tantalum strongly correlated to an elevated 2,782 and 181 ppm respectively with elevated Lithium.

A 370m long “Dulu 2” pegmatite (**Fig 5**) in a tiny 0.14 km² 3rd party license (enclosed by PL 11921 at ~115 km²) assayed to 5.49% Li₂O from ~2m depth, with highly elevated 7,624 ppm Caesium and 4,970 ppm Tantalum.

Dulu 1 and 2 (**Fig 5**) are separated laterally by only ~160m, with a potential ESE extension of Dulu 2 possible sub-surface in PL 11921 (Dulu 2 is at surface only ~180m distant along strike to the Company’s PL border).

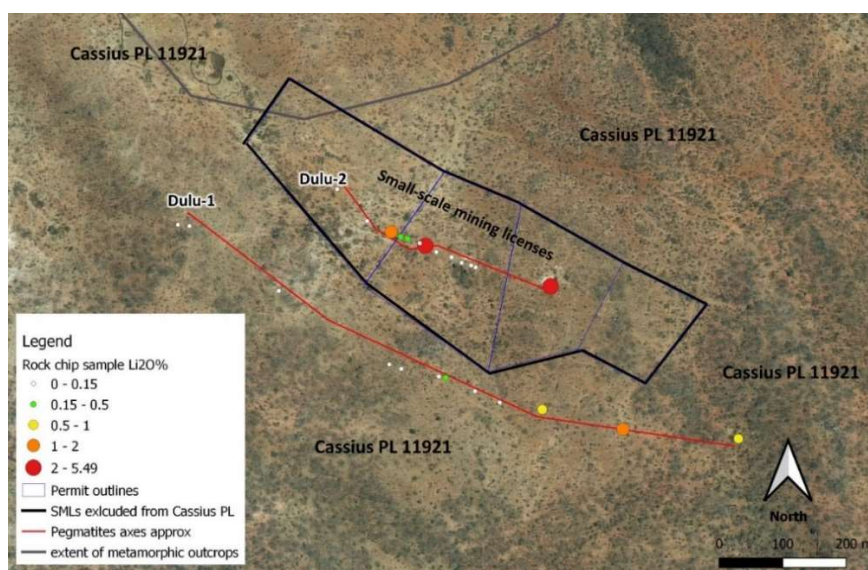


Fig 5: Dulu-1 and Dulu-2 pegmatites with Lithium (Li₂O%) rock sample results

Target 2 (**Fig 6**) is in adjacent PL 11720, within ~2.5 km of multiple spodumene-bearing pegmatites in the Hombolo area (3rd party licenses). Multiple Lithium pegmatites have been historically reported in several locations up to 5.2% Li₂O (Lithium Oxide) and 0.12% Ta₂O₅ (Tantalum Oxide), including Lontown (ASX: LTR) in 2015 in similar metasediments.

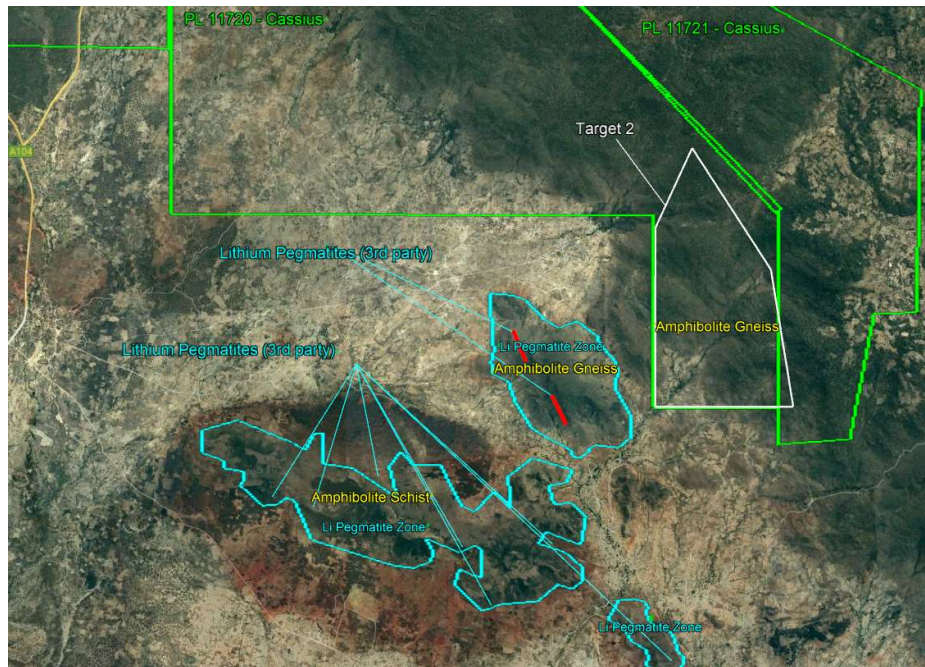


Fig 6: Target 2 exploration area, with neighbouring 3rd party historical Lithium pegmatite occurrences

About the CHENENE LITHIUM PROJECT

The Chenene Lithium Project consists of four contiguous Lithium exploration licenses totalling ~300 km² in central Tanzania, ~40 kms N of the capital city Dodoma (**Fig 7**), accessible by major road and unaffected by the annual wet season further south.

The main features are the NW-trending Chenene Hills of sheared granite within rolling plains formed mainly of eroded granitic soils. A belt of metamorphosed amphibolite schists and amphibolite gneiss rocks outcrops along the margins of the sheared granites within the Company's licenses, exposed intermittently above granitic soil plains. Its these metasediments that the Company is targeting in its Lithium exploration.



Fig 7: Chenene Lithium Project in Tanzania

Pegmatites are hosted in these metamorphosed rocks in the "Hombolo-Msangani belt", a NW-SE belt ~35 km long and 13 km wide. Folding was deformed by NW shearing, with the pegmatites emplaced prior to shearing. Lithium-bearing pegmatites (lepidolite and/or spodumene), together with elevated Caesium and Tantalum, have been identified in this belt at Dulu and Hombolo.

GHANA – INTERNATIONAL ARBITRATION

On 3 February 2023, the wholly-owned Ghanaian subsidiary (Cassius Mining Ltd, the “company”) commenced international arbitration against the Government of the Republic of Ghana (“Ghana”) seeking damages in excess of USD 275 million as a consequence of Ghana’s breaches of the Large Scale Prospecting License Agreement entered into with the company. The latest update in the International Arbitration is as follows:

10 May 2023 The company files and serves an amended Notice of Arbitration (“NOA”) and appoints its party-nominated arbitrator to the Tribunal.

31 July 2023 Ghana appoints its party-nominated arbitrator to the Tribunal.

Post Quarter End update:

9 Oct 2023 The Chairperson is appointed by the 2 co-arbitrators, formally constituting the 3-person Tribunal for the international arbitration.

Next Steps The parties have agreed that the Tribunal should determine certain preliminary issues before hearing the merits. The Tribunal is expected to shortly confirm the timetable for preliminary issues to be determined.

Cassius will continue to provide shareholders with regular updates on progress of the proceedings.

CORPORATE

The Company paid Director’s consulting fees and non-executive Director’s fees and statutory superannuation of \$54,000 for the quarter.

OTHER OPPORTUNITIES

The Company continues to review opportunities to expand its portfolio where a significant benefit can be identified for its shareholders.

This announcement is authorised for release to the ASX by the Board.

FURTHER INFORMATION

James Arkoudis (Director)

e: james@cassiusmining.com

SCHEDULE OF TENEMENTS AS AT 30 SEPTEMBER 2023

Location		Tenement / Mining Lease Number / Special Licence Number					
Madagascar		R14542 – 100%, R14960 – 100%					
Permit	Company	Int (%)	Type	Expiry date	Grant date	Area (km ²)	Commodity
14542	Soalara Calcaire SARLU	100	Exploitation (Mining)	03 Nov 2055	04 Nov 15	12.50	Limestone
14960	Soalara Calcaire SARLU	100	Exploitation (Mining)	03 Nov 2055	04 Nov 15	6.25	Limestone
Tanzania		11720/2021 – 100%, 11721/2021 – 100%, 11920/2022 – 100%, 11921/2022 – 100%					
Permit	Company	Int (%)	Type	Expiry date	Grant date	Area (km ²)	Commodity
11720	Cassius Mining (T) Limited	100	Prospecting (Exploration)	03 Oct 2025	29 Mar 22	92.63	Lithium
11721	Cassius Mining (T) Limited	100	Prospecting (Exploration)	03 Oct 2025	29 Mar 22	45.55	Lithium
11920	Cassius Mining (T) Limited	100	Prospecting (Exploration)	12 May 2026	13 May 22	47.00	Lithium
11921	Cassius Mining (T) Limited	100	Prospecting (Exploration)	12 May 2026	13 May 22	115.40	Lithium

License Permits are held by wholly owned subsidiary “Soalara Calcaire SARLU” in Madagascar and “Cassius Mining (T) Ltd” in Tanzania

Competent Person Statement - Chenene

Information in this “ASX Announcement” relating to Exploration Targets, Exploration Results and Mineral Resources has been reviewed by Mr. Andrew Pedley who is a member in good standing with the South African Council for Natural Scientific Professions (SACNASP). Mr. Pedley has sufficient experience that is relevant to the types of deposits being explored for and qualifies as a Competent Person as defined in the 2012 Edition of the “Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves” (JORC Code 2012 Edition). Mr. Pedley consents to the inclusion in this document of the matters based on the information in the form and context in which it appears. The market announcement is based on, and fairly represents, information and supporting documentation prepared by the Competent Person. Mr. Pedley is not an employee of the Company; he is a Senior Associate with the MSA Group of Johannesburg who are providing consulting services to Cassius Mining Ltd.

Competent Person Statement - Soalara

The information in this statement that relates to Exploration Targets and Exploration Results is based on information compiled by Mr Jannie Leeuwner – BSc (Hons) Pr.Sci.Nat. MGSSA and is a full-time employee of Vato Consulting LLC. Mr. Leeuwner is a registered Professional Natural Scientist (Pr.Sci.Nat. - 400155/13) with the South African Council for Natural Scientific Professions (SACNASP). Mr. Leeuwner has sufficient experience which is relevant to the style of mineralisation and type of deposits under consideration and the activity being undertaken to qualify as a Competent Person as defined in the Note for Mining Oil & Gas Companies, June 2009, of the London Stock Exchange and the 2012 Edition of the ‘Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves’ (JORC Code). Mr. Leeuwner consents to the inclusion of the information in this release in the form and context in which it appears.

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 TANZANIA

Appendix 5B

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

Name of entity

Cassius Mining Limited

ABN

13 115 027 033

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	(542)	(542)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	-	-
	(e) administration and corporate costs	(114)	(114)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	3	3
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	(653)	(653)

2.	Cash flows from investing activities		
2.1	Payments to acquire or for:		
	(a) entities	-	-
	(b) tenements	-	-
	(c) property, plant and equipment	-	-
	(d) exploration & evaluation	(40)	(40)
	(e) investments	-	-
	(f) other non-current assets	-	-

Consolidated statement of cash flows		Current quarter \$A'000	Year to date (3 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) entities	-	-
	(b) tenements	-	-
	(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	(40)	(40)

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	-	-

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	1,454	1,454
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(653)	(653)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(40)	(40)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	

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
4.5	Effect of movement in exchange rates on cash held	-	-
4.6	Cash and cash equivalents at end of period	761	761

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	761	1,454
5.2	Call deposits	-	-
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)	761	1,454

6.	Payments to related parties of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to related parties and their associates included in item 1	54
6.2	Aggregate amount of payments to related parties and their associates included in item 2	-
<i>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.</i>		

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

7. Financing facilities <i>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.</i>	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
7.1 Loan facilities	-	-
7.2 Credit standby arrangements	-	-
7.3 Other (please specify)	-	-
7.4 Total financing facilities	-	-
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.		

8. Estimated cash available for future operating activities	\$A'000
8.1 Net cash from / (used in) operating activities (item 1.9)	(653)
8.2 (Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(40)
8.3 Total relevant outgoings (item 8.1 + item 8.2)	(693)
8.4 Cash and cash equivalents at quarter end (item 4.6)	761
8.5 Unused finance facilities available at quarter end (item 7.5)	-
8.6 Total available funding (item 8.4 + item 8.5)	761
8.7 Estimated quarters of funding available (item 8.6 divided by item 8.3)	1.10
<i>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.</i>	
8.8 If item 8.7 is less than 2 quarters, please provide answers to the following questions:	
8.8.1 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: No it will be lower. A lot of work was done in the June quarter, but not paid till the September quarter.	
8.8.2 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: The company always monitors its cash position and it expects funding will be forthcoming via either equity or borrowings should it be required	

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

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

Answer: Yes, the company expects to be able to continue its operations and meet its business objectives.

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

- 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.

Date:25 October 2023.....

Authorised by: Wayne Kernaghan – Director, Cassius Mining Limited

(Name of body or officer authorising release – see note 4)

Notes

1. 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.
2. 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 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.