

ASX ANNOUNCEMENT

28 October 2022

FIRST QUARTER ACTIVITIES AND APPENDIX 5B

Cassius Mining Limited (“**Cassius**” or “the **Company**”) (ASX Code: **CMD**) is pleased to provide shareholders with the Company’s Activities Report for the quarter ending 30 September 2022.

CHENENE LITHIUM PROJECT, TANZANIA – *Operations Update*

- ✓ Exploration programme in process in 1st of 2 priority areas of PL 11921, both prospective for Lithium
- ✓ Target 1 covers an amphibolite gneiss outcrop, with recorded historic Lithium pegmatite presence:
 - 1st phase in-field rock chip sampling and mapping completed
 - Multiple pegmatite outcrops confirmed, mapped and sampled (Figs. 1-3) – still to be assayed
 - Sample preparation in process before dispatch to lab
 - Further update on 1st phase expected early November
 - Assay results expected ~mid/late December
 - 2nd phase rock chip sampling and mapping to follow short break
- ✓ Target 2 covers an amphibolite gneiss outcrop, believed an extension of host gneiss to Lithium pegmatites in adjacent 3rd party license:
 - In close proximity to 2017 Liontown (LTR) discovery¹ reporting >1.5% Li₂O (Lithium Oxide)
 - Rock chip sampling and mapping to start after Target 2 is completed



Figs 1-3 – Target 1 - Pegmatite outcrop and Rock Chip sampling

¹ Liontown Resources – ASX 5 April 2017 – “New High-Grade Lithium Discovery in Tanzania” – Tresor Prospect (Mohanga Project)

The map displays the following geological features and labels:

- Geological Units:**
 - Lithium Pegmatites (Dulu):** Indicated by a red line and label in the top left.
 - Amphibolite Gneiss:** Labeled in the upper left quadrant.
 - QF Gneiss:** Labeled in the center and lower center.
 - Red Soils:** Labeled in the lower left quadrant.
 - Sheared Granite:** Labeled in the upper right quadrant.
- Geographic Labels:**
 - BABAYU:** Located at the top left.
 - SABAH:** Located in the center.
 - MIUNGUTU:** Located on the right side.
 - Busi:** Located at the bottom center.
- Topographic Features:**
 - Contour Lines:** 300, 400, 500, 600, 800, 1000, 1200, 1400, 1600, 1800, 2000, 2200, 2400, 2600, 2800, 3000, 3200, 3400, 3600, 3800, 4000, 4200, 4400, 4600, 4800, 5000.
 - Streams:** Dulu, Neningha, Busi.
- Other Labels:**
 - Target Area #1:** A red polygonal area in the center.
 - PL 11921/2022 - Cassius:** A green label at the top center.
 - A104:** A green label at the bottom right.

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About the CHENENE PROJECT

The Project area consists of 4 contiguous exploration licenses of ~300 km² in central Tanzania, ~40 kms N of Dodoma (capital city), accessible by major road and unaffected by the annual wet season further south.

Lithium/Tantalum-bearing pegmatites have previously been identified in the metamorphic belt, which outcrops in several locations along the base of the granitic NW-SE trending Chenene Hills.

The Company is targeting two priority areas covering a total of ~65 km² with amphibolite gneiss outcrops (similar to known host rocks for Lithium-bearing pegmatites within the local area).

SOALARA LIMESTONE PROJECT, MADAGASCAR – Operations Update

- ✓ The Company released its Phase 1 coring results² in July 2022 on the Soalara Mineral Resource Estimation (MRE) programme in SW Madagascar.
- ✓ Phase 1 assays (400m cored) showed all 4 holes intersected thick limestones with ~73% of all assays averaging 97.02% wt CaCO₃ ("High Purity" Limestone in the Mitchell classification).
- ✓ Phase 2 started late August, coring ~500m (five vertical holes) on the same 500m grid and adjacent to the four vertical Phase 1 holes (to ensure the integrity of the MRE).
- ✓ Phase 2 has been successfully completed³ with excellent 93.3% core recovery (Phase 1 @ 92%). Samples are now in preparation to be sent for assay to SGS Australia. Results expected in December.
- ✓ An MRE will then be conducted on all nine Phase 1 & 2 holes, by H&S Consultants Ltd in Sydney (Geological Specialists in Resource Estimation and Feasibility Studies).



Fig 6: Limestone core recovery in Phase 2

² ASX 11 July 2022 "Soalara Limestone – Phase 1 Core Results"

³ ASX 20 October 2022 "Soalara Phase 2 Coring Completed"

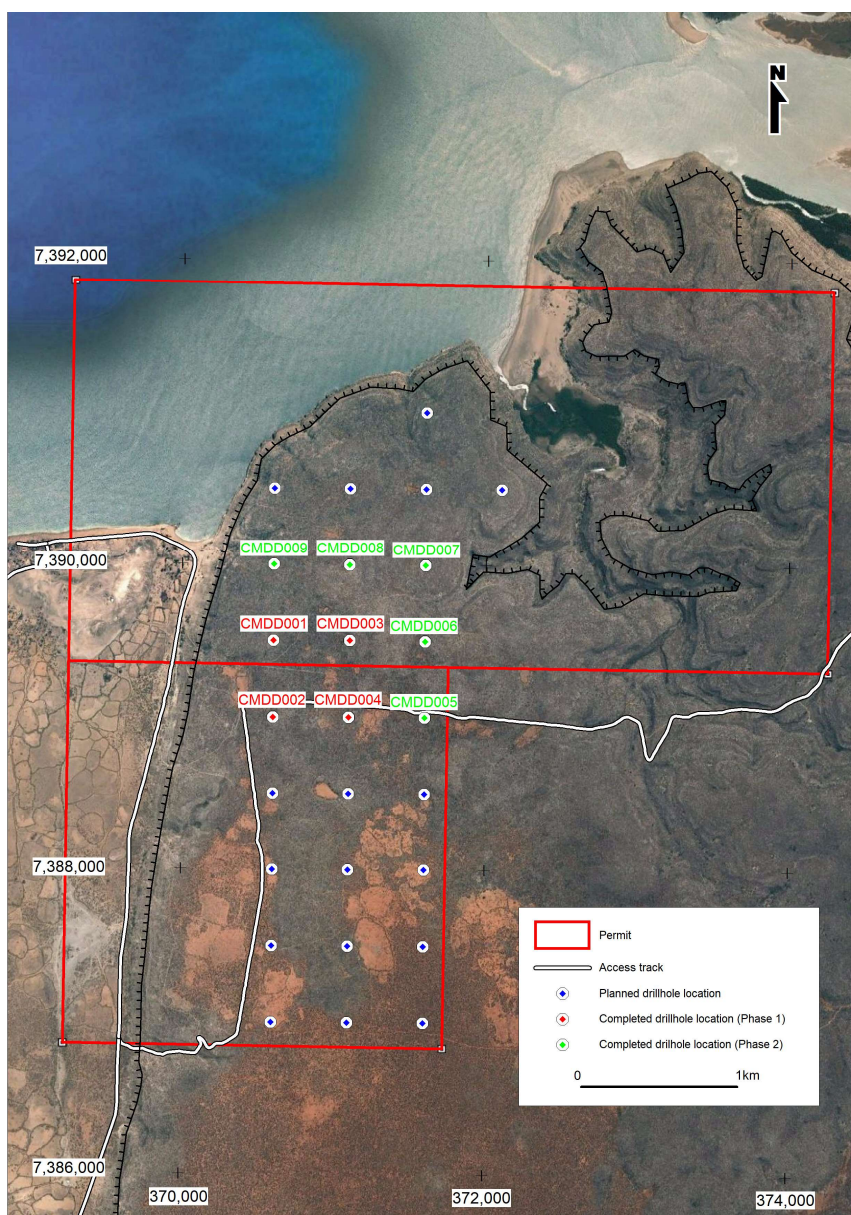


Fig 7: Phase 1 holes (red) and Phase 2 holes (green)

Forward Operations

Phases 1 and 2 combined will form a significant nine hole database across a 1 km² square grid on which the Company's consultants will conduct the MRE to potentially determine an upgrade from the existing JORC Exploration Target to a JORC Mineral Resource⁴.

The MRE outcome will help define the forward extent of the programme, as well as allow consideration to conduct a feasibility study on mining operations (potentially via a JV partnership, domestic or international).

The current total programme includes phased coring of up to 26 vertical holes at Soalara, where Cassius holds two contiguous Mining Licenses covering an area of 18.75 km² (valid for Mining to 2055).

⁴ The potential quantity and grade of the defined Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

About the SOALARA PROJECT

The Soalara deposit is a horizontal sequence of Eocene limestones of ~70-100m thickness, overburden free. It currently has a JORC Exploration Target of 491 to 818 Mt of Limestone with a purity of high to very high⁵.

The current coring programme is designed to quantify lateral and vertical purity, and continuity of the limestone sequence for possible future open pit mining. The programme is targeting a potential upgrade to a JORC Mineral Resource. The potential quantity and grade of the defined Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

GBANE GOLD PROJECT, GHANA – *Litigation Update*

During the last quarter the Company commenced dialogue and negotiations with the Republic of Ghana's Minister for Lands and Natural Resources, the Ghana Minerals Commission CEO, and the Attorney General of Ghana in an attempt to reach an amicable resolution to all matters in dispute between the parties. This followed a meeting between representatives of the parties in Perth on 2 September 2022 following which the parties released a joint statement as announced by the Company on 2 September 2022. The dialogue and negotiation are currently ongoing.

Simultaneously the company is finalising arrangements with its lawyers, to be able to commence international arbitration against the Government of Ghana.

CORPORATE

The Company announced on 3 August 2022 that it closed its fully subscribed capital raising which raised \$1.372m (before expenses).

The Company issued 80,748,180 new shares at an issue price of \$0.017 under ASX Listing Rules 7.1 and 7.1A.

The shares of Cassius were reinstated to quotation on ASX from 10am on 5 August 2022.

The Company fully repaid borrowings of \$429,000 during the quarter and is debt free.

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.

⁵ "Soalara High Grade Limestone Project – Independent Technical Review" – ASX 19 May 2016.

FURTHER INFORMATION

James Arkoudis (Director)

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SCHEDULE OF TENEMENTS AS AT 30 SEPTEMBER 2022

Location		Tenement / Mining Lease Number / Special Licence Number					
Madagascar		<i>R14542 – 100%, R14960 – 100%</i>					
Permit	Company	Int (%)	Type	Expiry date	Grant date	Area (sq. km)	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

The Licence Permits are held by wholly owned subsidiary Soalara Calcaire SARLU

Location		Tenement / Exploration Lease Number / Special Licence Number					
Tanzania		<i>11720/2021 – 100%, 11721/2021 – 100%, 11920/2022 – 100%, 11921/2022 – 100%</i>					
Permit	Company	Int (%)	Type	Expiry date	Grant date	Area (sq. km)	Commodity
11720	Cassius Mining (T) Limited	100	Prospecting (Exploration)	03 Oct 2025	29 March 22	92.63	Lithium
11721	Cassius Mining (T) Limited	100	Prospecting (Exploration)	03 Oct 2025	29 March 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

The Licence Permits are held by wholly owned subsidiary Cassius Mining (T) Ltd

Competent Person Statement - Soalara

The information in Report that relates to Exploration Targets and Exploration Results is based on information compiled by Dr David Jefferson who is a Member of the Institute of Materials, Minerals and Mining, a 'Recognized Professional Organization' (RPO) including in the list promulgated by the ASX from time to time. Dr Jefferson is a consultant working for SRK Exploration Services Ltd and has been engaged by Gulf Industrials Ltd to prepare documentation for the Soalara Limestone Property. He has sufficient experience which is related to the style of mineralization and type of deposit under consideration and to the activity which has been undertaken, to qualify as Competent Person as define by the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves", Dr. Jefferson consents to the report being issued in the form and context in which it appears.

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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 2022

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	(11)	(11)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	-	-
	(e) administration and corporate costs	(59)	(59)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	-	-
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	(70)	(70)

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	(178)	(178)
	(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	(178)	(178)

3.	Cash flows from financing activities		
3.1	Proceeds from issues of equity securities (excluding convertible debt securities)	1,372	1,372
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	21	21
3.6	Repayment of borrowings	(429)	(429)
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	964	964

4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	95	95
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(70)	(70)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	(178)	(178)
4.4	Net cash from / (used in) financing activities (item 3.10 above)	964	964

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	811	811

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	811	95
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)	811	95

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	-
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>	

7.	Financing facilities <i>Note: the term "facility" includes all forms of financing arrangements available to the entity.</i> <i>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)	(70)
8.2	(Payments for exploration & evaluation classified as investing activities) (item 2.1(d))	(178)
8.3	Total relevant outgoings (item 8.1 + item 8.2)	(248)
8.4	Cash and cash equivalents at quarter end (item 4.6)	811
8.5	Unused finance facilities available at quarter end (item 7.5)	-
8.6	Total available funding (item 8.4 + item 8.5)	811
8.7	Estimated quarters of funding available (item 8.6 divided by item 8.3)	3.27
<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: Not applicable	
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: Not applicable	

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: Not applicable

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:28 October 2022.....

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.