

ASX ANNOUNCEMENT

20 October 2022

## SOALARA PHASE 2 CORING COMPLETED

Cassius Mining Limited (“Cassius” or “the Company”) (ASX Code: CMD), is pleased to advise that Phase 2 of its coring programme has been successfully completed at the Soalara Limestone Project<sup>1</sup> in Madagascar.

- ***Five vertical holes successfully cored, each to the planned ~100m depth***
- ***Excellent average of 93.3% core recovery achieved (~92% recovery in Phase 1)***
- ***Core preparation underway to send pulps for assays at SGS labs***
- ***Nine hole Mineral Resource (MRE) study scheduled to follow assays***

Cassius Technical Director David Chidlow comments “Following Phase 1’s outstanding results confirming high purity Limestone in every hole, we are keen to see Phase 2’s assays and then conduct our initial MRE study.”

### Phase 2 Core and Assays

Five vertical holes (CMDD005 to CMDD009, Fig 2) were each cored in HQ size to ~100m for a total of 500.67m. An excellent average recovery of ~93.3% has been achieved (higher than the ~92% achieved in Phase 1).



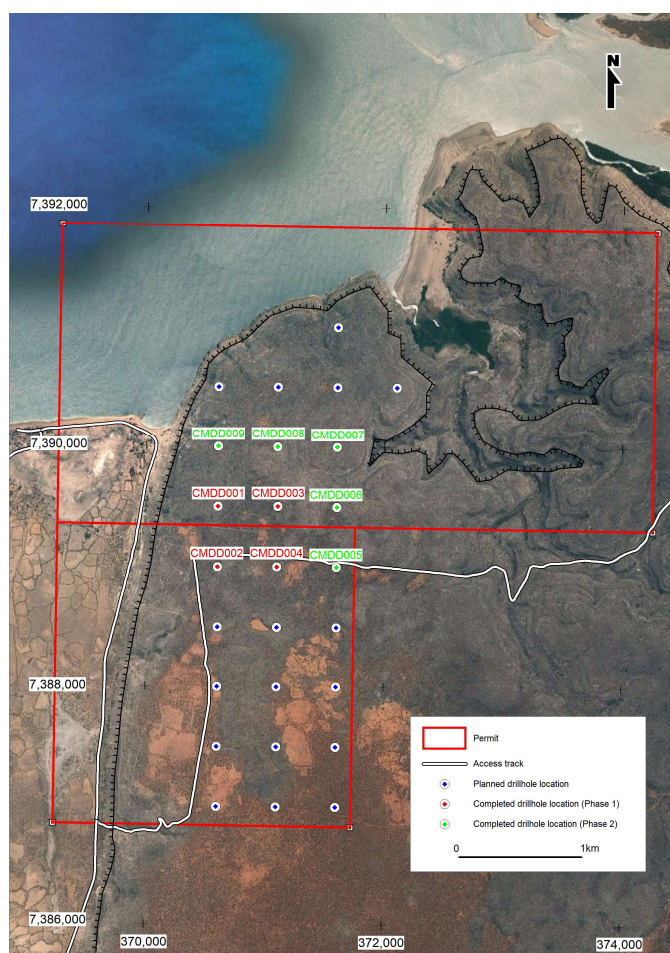
Fig 1: Limestone core recovery in Phase 2

<sup>1</sup> “Madagascar Drilling Programme – Phase 1” - ASX 28 May 2021

Cassius's onsite Geo consultants (Vato) have completed geotechnical / geological logging, core photography, density measurements, core cutting and sampling for all 5 holes. Core samples are now in process of delivery to in-country preparation laboratory OMNIS, who will prepare pulps for the certified SGS laboratory (Perth, WA) to run multi-oxide XRF assays on each sample (along with standards, blanks and duplicates). It is currently expected that samples will be ready to be couriered to Australia via DHL Express in November, with subsequent assay results available December/January. An expected total of ~584 samples will be assayed.

A Drill Collar survey is complete for 9 holes, with Topographical survey planned soon for the post-assay MRE:

Hole_ID	Depth	Easting	Northing	RL	Azimuth	Inclination
CMDD001	100.00	370,598.00	7,389,501.60	88.44	0	-90
CMDD002	100.12	370,599.63	7,389,001.03	83.03	0	-90
CMDD003	100.00	371,101.00	7,389,501.15	93.95	0	-90
CMDD004	100.00	371,099.11	7,388,999.92	91.21	0	-90
CMDD005	100.25	371,598.04	7,389,001.52	89.35	0	-90
CMDD006	100.25	371,599.69	7,389,499.24	87.42	0	-90
CMDD007	100.03	371,599.17	7,390,000.63	90.79	0	-90
CMDD008	100.04	371,098.52	7,389,998.57	94.81	0	-90
CMDD009	100.10	370,599.63	7,389,999.75	93.45	0	-90



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



Cassius has also been busy assisting the community at Soalara with medical supplies and a new water well for future benefit to the local village.



**Fig 3: New water well – future Soalara Community benefit**

### **Previous Results from Phase 1 Coring<sup>2</sup>**

Four vertical holes (CMDD001 to CMDD004) were previously cored in Phase 1, each to ~100m. Multiple thick limestone sequences were confirmed with purities from 93.5 to over 98.5%  $\text{CaCO}_3$ , overburden free, with only thin interbedded clayish limestones/clays.

Upper Limestone sequences were noted to be of higher purity in Phase 1 than the lower Limestone sequences, although further significant Limestone sequences were confirmed all the way to 100m total depth in every hole with only relatively thin clay/clayish Limestone horizons.

Lateral and vertical limestone continuity was also confirmed with depth between all four holes.

~73% of assays from every metre of the total ~400m cored showed an average of 97.02 %wt  $\text{CaCO}_3$  (“High purity” limestone<sup>3</sup>), forming a high quality mineral base onto which the Phase 2 results will be added before the MRE is conducted.

<sup>2</sup> “Soalara Limestone – Phase 1 Core Results” - ASX 11 July 2022

<sup>3</sup> Mitchell Classification 2011

## About Soalara

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 high<sup>4</sup>. The current coring programme is designed to quantify lateral and vertical purity and continuity of the limestone sequence for potential 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.

## Forward Operations

Phases 1 and 2 combined will form a significant nine hole database across a 1 km<sup>2</sup> square grid (collar to collar) on which the company's MRE consultants, H & S Consultants Ltd in Sydney (Geological Specialists in Resource Estimation and Feasibility Studies), will conduct a study to potentially determine an upgrade from the existing JORC Exploration Target to a Mineral Resource<sup>5</sup>.

Following the MRE study, Cassius's intention is to conduct Phase 3 of the programme with results reviewed after each phase to continuously define forward extent of the programme, as well as consideration of conducting a feasibility study on mining operations (potentially via a JV partnership, whether 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 km<sup>2</sup> (for Mining to 2055).

*This has been authorized and approved by the board for release.*

## FURTHER INFORMATION

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### Competent Person Statement

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 'Australian 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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<sup>4</sup> "Soalara High Grade Limestone Project – Independent Technical Review" – ASX 19 May 2016.

<sup>5</sup> 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.