

## **SECOND DRILL RIG TO BE MOBILISED AT MPOSA FOLLOWING ENCOURAGING INITIAL HOLES**

### **KEY POINTS**

- **A DIAMOND RIG WILL BE MOBILISED TO MPOSA TO COMPLEMENT THE CURRENT SONIC RIG PROGRAM**
- **DIAMOND RIG WILL TARGET THE POTENTIAL FOR DEEPER HMS OR OTHER DEPOSITS, WHILST SONIC RIG FOCUSES ON THE SHALLOWER MINERAL SAND HORIZONS**
- **POTENTIAL FOR IONIC CLAY DEPOSITS BELOW THE HMS HORIZON TO BE DETERMINED**
- **NEW PRIORITY TARGET (NAMASALIMA) IDENTIFIED ADJACENT TO THE MPOSA DEPOSIT**

### **OVERVIEW**

Chilwa Minerals Limited (ASX: CHW) (“**Chilwa**” or the “**Company**”) is pleased to announce that it intends to mobilise a diamond drill rig to the Company’s Mposa mineral sands deposit, located in southeast Malawi, which will work in parallel with the existing sonic drill rig that commenced drilling on 9 October 2023 (*reference to ASX announcement*). As previously reported, the bedrock has proven to be located significantly deeper than anticipated and diamond drilling is considered to be a faster and better method to test the potential for mineralisation in the deeper zones.

Prior to the commencement of drilling, it was expected that the targeted mineral sand horizon would be thicker than the 6.2m average depth that the Mineral Resource is based upon. The initial holes at the north, south and central portions of Mposa intersected the consolidated bedrock at depths ranging from of 35 to 51 metres below surface. Of this, the thickness of the mineral sand horizon measured in the core varies from 2 to 12 metres, with interbedded clays occurring below (Figure 1).

Chilwa will utilise the diamond rig to test the full sequence of clays and sands on a wide spaced drill pattern, with the sonic rig continuing with the originally planned drill spacing. Drilling undertaken by the sonic rig will stop as soon as the clays have been intersected. The diamond drill rig has been sourced by project partner and major shareholder Luso Global Mining (a subsidiary of the Mota-Engil Group). Their fleet of equipment in Africa will enable expedited mobilisation to site, and further highlights the value this partnership brings to the Company.

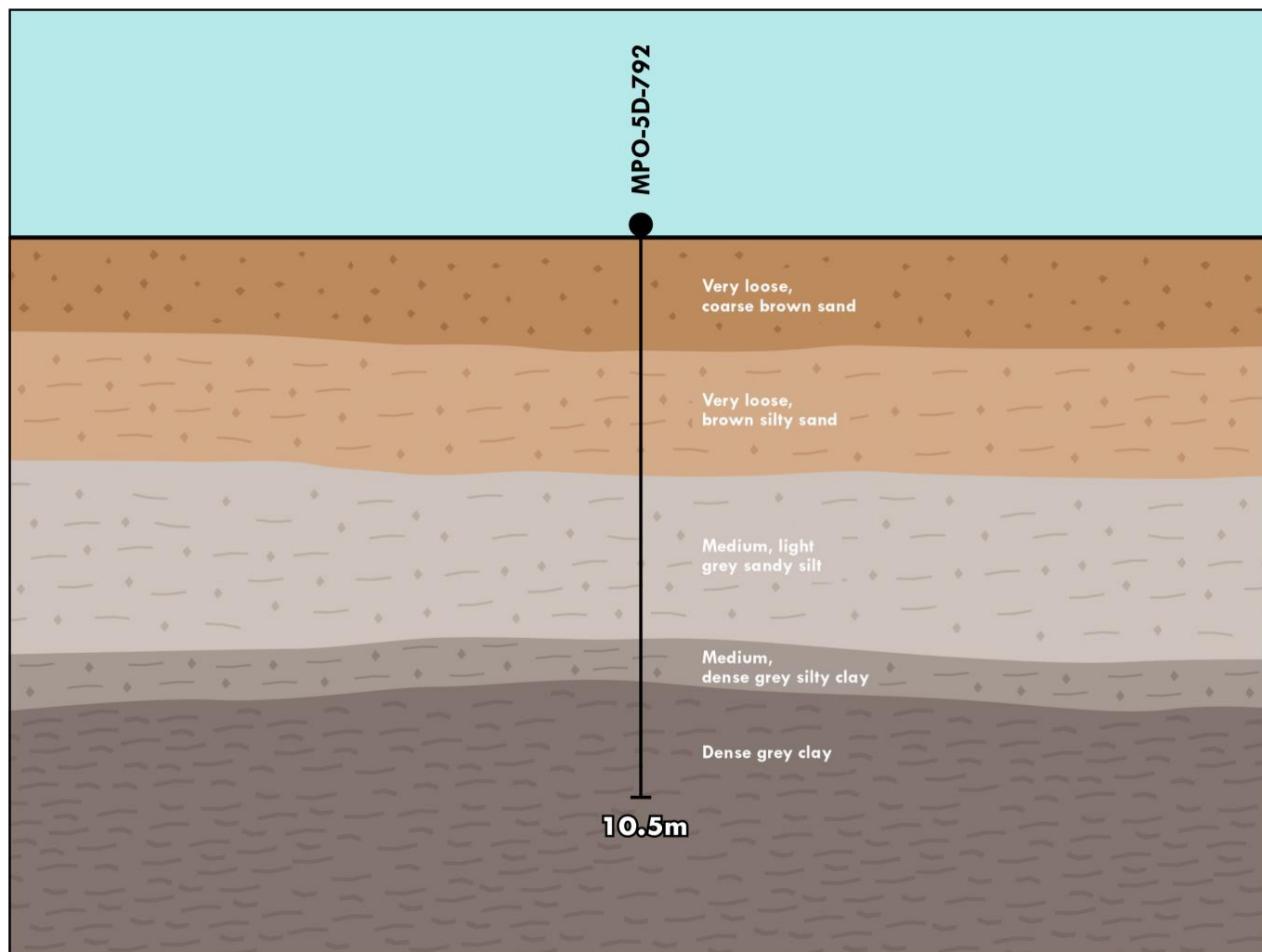
#### **Chilwa’s Managing Director, Cadell Buss, commented:**

*“The deployment of the second rig will allow the expedited assessment of the mineral sands potential at Mposa, whilst also providing an initial broad scale test of the underlying clays.*”

*“Our main goal is still focused on growing the Mineral Sands Mineral Resource in size and confidence however this unexpected development of deeper sedimentary packages warrants further investigation. We expect to continue sonic drilling through to the third week of December before a short break for Christmas. Sonic drilling is then expected to recommence in early January with the diamond rig expected on site in February.”*



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**Figure 1:** Schematic cross section showing typical variations downhole

### PROJECT GEOLOGY

Geologically, the Lake Chilwa area is described as a structurally controlled endorheic basin, that is, a basin that does not drain into the sea. The sediments that have been deposited in the basin have been derived from the surrounding catchment area.

A significant component of the geology which forms the catchment comprise : in the south (carbonatite with REE enrichment), west (monazite enrichment) and east (lithium-bearing (LCT) pegmatites). As this geology is eroded, it accumulates within the depositional system as either fluvial, fluvio-deltaic, littoral, lacustrine or aeolian deposits. The depositional environment often contributes to the selective accumulation of detrital minerals with specific mineralogical characteristics (natural concentration/placer deposits).

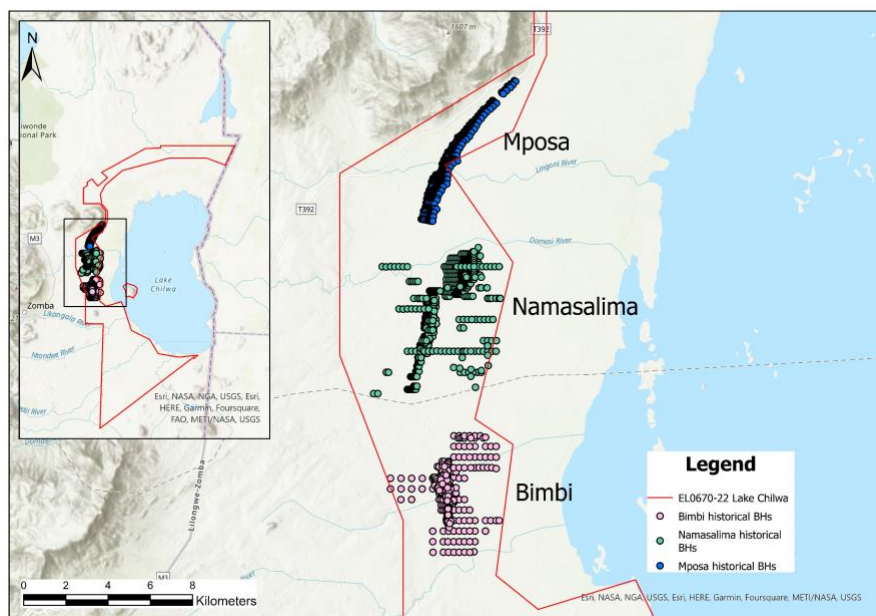
Erosion of the hinterland was the source of the current HMS mineralisation that Chilwa is currently exploring, however the company would like to determine if there is any potential for other mineralisation types occurring in the earlier depositional history of the basin.

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### NEW PRIORITY TARGET AREA IDENTIFIED

Reconnaissance by Chilwa geologists along with Competent Person, Mr Mark Burnett during his recent site visit indicated the presence of a large topographic high, which Chilwa will explore at Namasalima. This target area is located between the Mposa and Bimbi deposits on the western shore of Lake Chilwa (Figure 2). It was identified as a target in 2016 following a radiometric survey and mapping with 173 auger holes being drilled on the target. As none of the historical data remains, Chilwa will explore the area to determine if this feature contains HMS mineralisation as well as completing an updated Lidar survey to confirm the elevation and location of the 631 amsl and 623 amsl terraces.

The Company will also commence a termite mound sampling program in the Namasalima target area in Q1 of 2024. Samples will be hand panned and examined for HMS using handheld XRF, with selected samples being sent to ALS Perth for further test work.



**Figure 2:** New priority target area, Namasalima, in relation to Mposa and Bimbi

- I. The BH's indicated in green are the locations of the collars for the historical auger work, no data is presently available. It is unclear if all these holes were drilled, the company is aware of 174 holes recorded as being drilled and assayed. The assay method is also undetermined.

### AUTHORISATION STATEMENT

This update has been authorised to be given to ASX by the Board of Chilwa Minerals Limited.

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**-ENDS-**

### JORC 2012 Inferred Mineral Resource Estimate

A Mineral Resource Estimate (MRE) for the Project has been classified and reported in accordance with the JORC code (2012). The Mineral Resource Estimate has been classified as Inferred and at a 1.0 % THM cut-off contains 2.4 Mt of THM. The MRE is allocated across the Project deposits in **Table I** below.

**Table I Inferred Mineral Resources at 1.0% THM as at 31 July 2022 (Refer IPO Prospectus 5th April 2023)**

Deposit	Volume (million m3)	Tonnes (million t)	Dry Density (t/m3)	Gangue (%)	Ilmenite (%)	Slimes (%)	THM (%)	Zircon (%)
Bimbi	1.5	2.6	1.7	0.7	4.3	15.3	5.3	0.3
Northeast Bimbi	3.6	6.1	1.7	0.3	2.2	15.9	2.7	0.1
Mposa (Main)	11.7	19.4	1.7	0.7	3.2	11.7	4.3	0.4
Mposa (North)	0.6	1.0	1.7	0.3	1.4	8.3	1.9	0.2
Mpyupyu (dune)	2.0	3.5	1.7	1.2	5.7	15.3	7.1	0.2
Mpyupyu (flat)	9.5	16.4	1.7	0.5	2.9	15.4	3.6	0.2
Nkotamo	0.1	0.2	1.5	1.1	3.0	28.3	4.2	0.2
Halala	6.0	8.9	1.5	0.9	2.6	9.8	3.7	0.2
Beacon	0.4	0.6	1.5	0.6	1.8	17.7	2.5	0.1
Namanja West	2.0	2.9	1.5	0.8	2.3	14.7	3.3	0.2
<b>Total</b>	<b>37.5</b>	<b>61.6</b>	<b>1.6</b>	<b>0.7</b>	<b>3.0</b>	<b>13.3</b>	<b>3.9</b>	<b>0.3</b>

- Estimates of the Mineral Resource were prepared by AMC Consultants (UK) Limited (AMC).
- In situ, dry metric tonnes have been reported using varying densities and slime cut-off per deposit.
- Material below 30% slimes for Halala, 20% slimes for Bimbi, Northeast Bimbi and Mpyupyu (dune and flat) and 25% slimes for Mposa Main and Mposa North. All other deposits are a stated using 30% slimes cut-off.
- Tonnages and grades have been rounded to reflect the relative uncertainty of the estimates and resultant confidence levels used to classify the estimates. As such, columns may not total.
- Estimates of the Mineral Resource have been constrained by ultimate pit shells to demonstrate Reasonable Prospects for Eventual Economic Extraction
- Estimates are classified as Inferred according to JORC Code.

### Compliance Statement

The exploration results contained in this announcement were first reported by the Company in its prospectus dated 5 April 2023 and announced to ASX on 3 July 2023. The results were reported in accordance with the 2012 edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". The Company confirms that it is not aware of any new information or data that materially affects the information included in the Prospectus.

### Forward Looking Statements and Important Notice

This announcement may contain some references to forecasts, estimates, assumptions and other forward-looking statements. Although Chilwa believes that its expectations, estimates and forecast outcomes are based on reasonable assumptions, it can give no assurance that they will be achieved where matter lay beyond the control of Chilwa and its Officers. Forward looking

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statements may be affected by a variety of variables and changes in underlying assumptions that are subject to risk factors associated with the nature of the business, which could cause actual results to differ materially from those expressed herein.

### **Competent Person's Statement**

The information in this Announcement that relates to resource estimates is based on information compiled by Mark Burnett, a competent person who is a fellow of the Geological Society of London and is an employee of AMC Consultants (UK) Limited. Mark Burnett is not an employee or Shareholder of the Company and has no conflict of interest. Mark Burnett 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 JORC Code. Mark Burnett consents to the inclusion of the Independent Geologist's Report and the matters based on his work in the form and context in which it appears.