

### **ASX ANNOUNCEMENT**

**ASX : CHW** 14 June 2024

# AEROMAGNETIC SURVEY COMPLETED COVERING ENTIRE CHILWA PROJECT

#### **KEY POINTS**

- An Aeromagnetic and Radiometric Survey has been completed over the entire Chilwa Critical Minerals Project.
- The Lake Chilwa area contains a number of carbonatites<sup>1</sup>, which are known source rocks for rare earth mineralisation. The aeromag survey results will be used to better define the carbonatites within the Project area for follow up assessment.
- The Company anticipates the modelled and interpreted survey data to be available in mid-July.
- Diamond drilling will commence following a review of the aeromag data for improved targeting.

#### **OVERVIEW**

Chilwa Minerals Limited (ASX: CHW) ("**Chilwa**" or the "**Company**") is pleased to announce that it has completed an extensive Aeromagnetic and Radiometric Survey over the entire 708km² Chilwa Critical Minerals Project (**Project**).

The Lake Chilwa area is described as an endorheic basin, which occurs where the river system is completed isolated from the ocean. With other mapped carbonatites within and surrounding the Chilwa Project<sup>2</sup>, the Company believes there is value in exploring for the discovery of both primary and secondary clay hosted rare earth elements mineralisation within the project area.

The Company will commence diamond drilling once the results of this program are received to focus in on high priority areas.

#### Chilwa's Managing Director, Cadell Buss, commented:

"Whilst we are firmly focused on the current drilling program, the initial field results are an interesting surprise and it makes sense for the Company to broaden its exploration program, particularly in the clays that underly the mineral sands horizon. With this new information, the Company decided to complete a project wide aeromag and radiometric survey, rather than over just the extension area as originally communicated in the prospectus, to detect high-priority targets that we will look to follow up with further exploration activities.



<sup>&</sup>lt;sup>1</sup> Carbonatites of the Chilwa Series of Southern Nyasaland 1953

<sup>&</sup>lt;sup>2</sup> University of Exeter-Mineralogical Magazine -Dowman, Wall, Treloar 2017



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"The Company took a pragmatic and measured approach to delay diamond drilling3 until the results of the survey have been returned, so as to not waste expensive diamond drilling by drilling 'wildcat' holes. The results from NRG are due at the end of July. I look forward to updating the market further with the results of this survey as it becomes available."



Figure I – Chilwa Critical Minerals Project. The survey covered the entire Project area, including Chilwa Island

#### **Survey Details**

New Resolution Geophysics (**NRG**) was contracted to undertake an airborne high-resolution magnetic and radiometric data survey over a 708 square kilometre area covering the entire Chilwa Project, with a total of 10,498 line kilometres flown at  $100m \times 1,000m$  line spacings. NRG is a highly regarded geophysics contractor, completing similar surveys over prospective carbonatites in Africa and Australia.

High-resolution magnetic data has the potential to save significant exploration expense and time by identifying areas of magnetisation (carbonatites) and favourable structures in and around the host rocks.

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The data is currently being processed with the data and interpretation expected in mid-July.



Figure 2 - AS350 B-Series helicopter used by NRG to undertake the Chilwa Project geophysics survey.

#### **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 1** below.

Table I Inferred Mineral Resources at 1.0% THM as at 31 July 2022



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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
Total	37.5	61.6	1.6	0.7	3.0	13.3	3.9	0.3

- 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 information in this announcement that relates to Mineral Resource estimates which were prepared and first disclosed under JORC Code 2012. The information was extracted from the Company's previous AX announcements as follows:

Project Mineral Resource estimate: 3 July 2023 'Prospectus' (dated 5 April 2023)'.

All of the above announcements are available to view on the Company's website <a href="https://www.chilwaminerals.com.au/">https://www.chilwaminerals.com.au/</a>. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original announcements, and, in the case of reporting of Ore Reserves and Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which any Competent Person's findings are presented have not been materially modified from the original market announcement.

#### 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 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.