

**ASX RELEASE** 

29 February 2024

# Geophysical study pinpoints prospective carbonatite, IOCG, Niobium and REE targets across Norwest's large West Arunta ground holding.

-The new targets underpin high-priority geochemical anomalies previously identified from Norwest's large soils database.

# Highlights:

- A new geophysical interpretation has identified 31 targets across the Company's West Arunta ground holding that have potential for mineral deposits including carbonatite, IOCG, and REEs.
- These targets are coincident or located adjacent to high-priority REE, lithium and niobium surface anomalies identified from more than 13,000 soil samples collected by Norwest and independently analysed in 2022 & 2023.
- A gravity acquisition program will soon be undertaken to refine drill targeting as IOCG and carbonatite deposits share a common association with anomalous gravity responses.
- Tenement E80/5031 includes a number of high-priority magnetic targets and associated geochem anomalies within an 8km x 2km drill ready zone. Drill planning will be finalised after acquisition and analysis of the gravity data.

In January 2024 **Norwest Minerals Limited** ("Norwest" or "the Company") (ASX: NWM) appointed Southern Geoscience Consultants to undertake a new geophysical structural interpretation across Norwest's large West Arunta tenure package. Using government and open file geophysical data and information from work undertaken between 2016 and 2018, the study resulted in the identification of 31 new critical mineral targets including IOCG, carbonatite and REE. The targets have been ranked according to factors such as size, structural setting, and geophysical responses.

Norwest has matched the new geophysical target occurrences to critical mineral anomalies identified from recent analysis of +13,000 fine-fraction (multi-element assayed) soils collected in 2021 & 2022. The relationship between the geophysical and geochemical targets is very encouraging. Norwest has contracted Atlas Geophysics to undertake a gravity ground survey across its key West Arunta critical mineral target areas with the program commencing in approximately 4 weeks. The gravity data is critical for carbonatite and IOCG drill targeting in the West Arunta region.

# Norwest's CEO, Mr. Charles Schaus commented:

"The new geophysical study results provide further confirmation of the excellent prospectivity our West Arunta ground package holds for a major critical mineral discovery. Importantly, many of the high priority targets are located within tenement E80/5031 where Norwest undertook a large Heritage study late last year. Thus, this area is drill ready with only the gravity survey required to finalise drill hole positions. Next month Atlas Geophysics will commence Norwest's maiden gravity survey across its West Arunta critical mineral targets including tenement E80/5031 and tenement E80/5846 located just south of the Luni discovery."

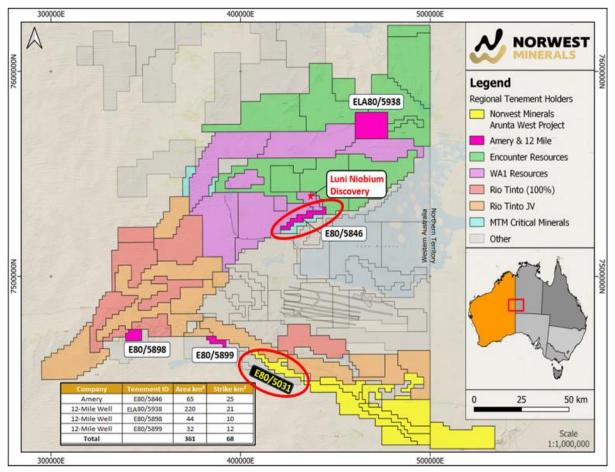


Figure 1 – Map highlighting the tenements where gravity acquisition programs are set to commence next month.

# Norwest Minerals Limited – New Geophysical Study Results

#### Summary

A total of 31 new targets have been proposed, and 8 targets from previous work have been retained. These targets encompass the various deposit styles of interest within the West Arunta tenure package. The ranking of these targets is determined by factors such as size, structural setting, and geophysical responses.

The primary recommendation for follow-up exploration is the acquisition of higher resolution gravity data across the project area. The focus on gravity data will not only enhance the understanding of subsurface features and aid in refining exploration strategies for these deposit types, but also has the potential to identify new targets associated with higher gravity response.

In addition, a higher resolution gravity survey may also provide an additional tool to identify large scale paleo-drainages associated with greater thickness of cover. These paleo-drainages have potential to concentrate wide zones of clay hosted rare earth elements (REE) from the weathered West Arunta granites located to the north.

Norwest has recently confirmed gravity acquisition will be undertaken by Atlas Geophysics who are mobilising to the West Arunta region this week. Atlas will complete a gravity program for another explorer prior to commencing Norwest's gravity fieldwork. Norwest's new gravity acquisition will cover high priority zones including tenement E80/5031 which extends 30kms along prospective critical mineral targets and tenement E80/5846 located immediately south of the Luni niobium discovery. Figure 1.

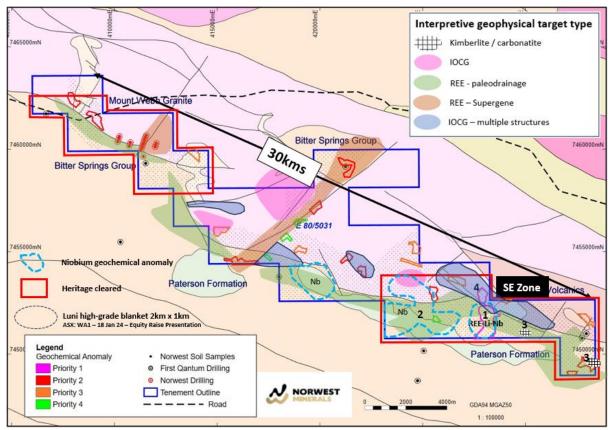


Figure 2 – Tenement E80/5031 geology with new geophysical targets and critical mineral geochemical anomalies. Luni high-grade Nb zone displayed for scale-of-target reference.

The **SE Zone** is an 8km x 2km target endowed area located within tenement E80/5031. The SE Zone was cleared for drilling late last year. The key targets hosted within the SE Zone are shown on the map in Figure 2 (above) and include:

- 1. a 2km x 1km coincident REE / Lithium /Niobium high priority anomaly (geochemical)
- 2. a 2km x 2km Nb anomaly (geochemical) covering paleochannel & IOCG magnetic targets
- 3. 2 x kimberlite / carbonatite anomalies; one coincident with a priority 1 geochem target
- 4. a significant IOCG target zone with 2 coincident priority 1 geochemical anomalies

A second drill ready zone at the NW extent of E80/5031 hosts REE magnetic targets, 2 x priority 1 geochemical targets and the drilling (Norwest in 2023) along the volcanic-sedimentary contact where significant clay hosted rare earths were intersected. A number of other coincident geochemical – geophysical anomalies are present withing E80/5031. All anomalous targets areas will soon be refined for precise drill targeting upon completion of the upcoming gravity study.

### **Recent West Arunta ground acquisition**

On 14 February 2024 Norwest announced it had acquired four West Arunta tenements prospective for niobium and rare earth elements. The 360km<sup>2</sup> ground package includes tenements located immediately adjacent to tenements held by WA1 Resources Limited (ASX: WA1, \$650m mkt. cap.) and Encounter Resources Limited (ASX: ENR, \$100m mkt. cap.), where niobium-REE mineralised carbonatites have recently been discovered.<sup>1</sup>

The new tenements are E80/5846 which is the closest tenement south of the WA1 Luni niobium discovery. To the north, ELA80/5938 is strategically lodged between tenements held by WA1 and Encounter. Tenements E80/5898 & E80/5899 are located west along strike of Norwest's 1560km<sup>2</sup> Arunta West project area where significant clay hosted REE mineralisation has been reported.

# Tenement E80/5846

Granted exploration license E80/5846 is located within 20kms of 3 critical mineral rich carbonatites discovered by Encounter Resources and within 10kms of WA1 Resources exciting Luni niobium carbonatite. The simplified geological map below (Figure 3) suggests these carbonatites occur close to the domain boundaries between the Carrington Suite - Lake Mackay Quartzite (Luni & Emily) and the Carrington Suite - Lander Formation (Crean & Hurley) with all being associated with a series of southeast trending geological structures.

Notably, a major domain boundary between the Lander Rock Formation and Amadeus Basin sediments extends the length of E80/5846 and is intersected by these southeast trending structures. At the eastern extent of this tenement, the boundary appears to disrupt the area where it meets the Carrington Suite and Lake Mackay Quartzite (the geological unit associated with the Luni carbonatite). This tenement will be included in the upcoming gravity survey which will assist in the hunt for critical mineral targets.

<sup>1</sup> Investors should note that market capitalisation reflects many factors including stage of development of projects, and that any reference to resources, reserves and/or production at third party projects does not guarantee the same or similar results for the Norwest projects.

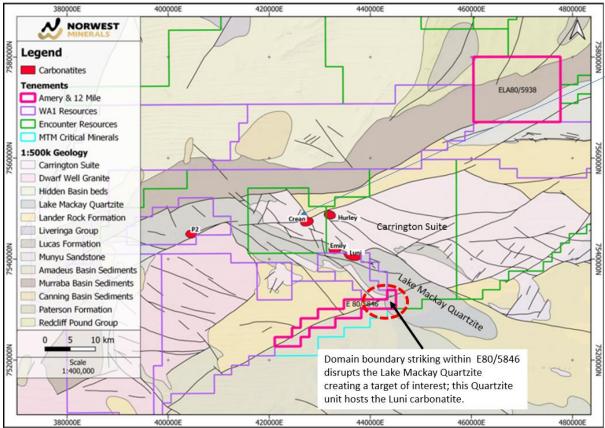


Figure 3 – Simplified geology map showing the recent carbonatite discoveries and two of Norwest's newly acquired tenements E80/5846 and ELA80/5938 located nearby.

#### Tenement ELA80/5938

This 220km<sup>2</sup> tenement (application) is wedged between ground held by WA1 and Encounter. Potential targets include oxide zones and other geological features including carbonatites and IOCG. This tenement will likely be included in future airborne gravity survey acquisition due to its large size and challenging access.

#### **Arunta West Project**

Norwest is an established West Arunta explorer holding a 1560km<sup>2</sup> ground package. All active tenements are covered by fully executed Land Access Agreements (LAAs) and supported by a Mining Entry Permit issued to Norwest by the Minister for Aboriginal Affairs. Norwest has been exploring its highly prospective West Arunta ground holding since 2019.

The Arunta West project tenements extend over 100kms west from the WA-NT state border straddling the contact between West Arunta Belt volcanics and the sediments of the Bitter Springs Formation. In late 2022 Norwest drill tested a 3-kilometre REE soil anomaly where +1000 ppm TREO in clays were intersected<sup>2</sup>. In November 2023 Norwest completed Heritage studies across 2 large areas for follow-up drill testing of REE and other critical mineral targets. Figure 4.

<sup>&</sup>lt;sup>2</sup> ASX: NWM – Announcement 22 February 2023, 'Arunta West drilling results'

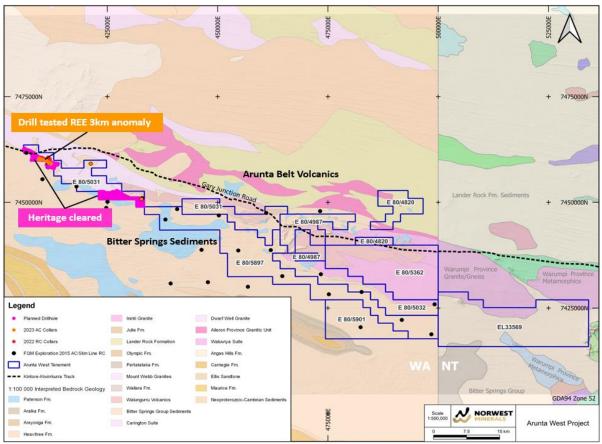


Figure 4 – Simplified geologic map showing the Arunta Belt volcanics and Bitter Springs sediments covered by the Company's Arunta West project tenements. The drill tested 3 km soil anomaly and the 2 Heritage cleared drill-ready zones are located on tenement E80/5031 near the western extent of the 1560km<sup>2</sup> ground package.

# **Other Projects**

Norwest also holds 100% of the Bulgera Gold project located 50kms northeast of the Plutonic Gold Mine. Bulgera hosts an indicated and inferred JORC resource estimate of 5.0 million tonnes grading 1.2 g/t Au for 200,000 ounces. Discussions are underway regarding oxide supply to a nearby gold plant or project sale<sup>3</sup>.

The Company's portfolio also includes 100% of the Bali Copper project where recent exploration has identified multiple narrow high-grade copper-rich veins extending up to 900 metres along the surface. Norwest has completed Heritage studies across multiple zones for future drill testing <sup>3</sup>.

This ASX announcement has been authorised for release by the Board of Norwest Minerals Limited.

For further information, visit <u>www.norwestminerals.com.au</u> or contact

Charles Schaus Chief Executive Officer E: <u>infor@norwestminerals.com.au</u>

<sup>&</sup>lt;sup>3</sup> ASX: NWM – Announcement 16 March 2022, 'Bulgera Project resource update'

### Norwest Minerals Limited – New Geophysical Study Results

#### FORWARD LOOKING STATEMENTS

This report includes forward-looking statements. These statements relate to the Company's expectations, beliefs, intentions or strategies regarding the future. These statements can be identified by the use of words like "will", "progress", "anticipate", "intend", "expect", "may", "seek", "towards", "enable" and similar words or expressions containing same.

The forward-looking statements reflect the Company's views and assumptions with respect to future events as of the date of this announcement and are subject to a variety of unpredictable risks, uncertainties, and other unknowns. Actual and future results and trends could differ materially from those set forth in such statements due to various factors, many of which are beyond our ability to control or predict. Given these uncertainties, no one should place undue reliance on any forward-looking statements attributable to the Company, or any of its affiliates or persons acting on its behalf. The Company does not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise. Neither the Company nor any other person, gives any representation, warranty, assurance, nor will guarantee that the occurrence of the events expressed or implied in any forward-looking statement will actually occur. To the maximum extent permitted by law, the Company and each of its advisors, affiliates, related bodies corporate, directors, officers, partners, employees and agents disclaim any responsibility for the accuracy or completeness of any forward-looking statements whether as a result of new information, future events whether as a result of new information, statements are an agents disclaim any responsibility for the maximum extent permitted by law, the Company and each of its advisors, affiliates, related bodies corporate, directors, officers, partners, employees and agents disclaim any responsibility for the accuracy or completeness of any forward-looking statements whether as a result of new information, future events whether as a result of new information, future events or results or otherwise.

#### **COMPETENT PERSON'S STATEMENTS**

#### Exploration

The information in this report that relates to Exploration Results and Exploration Targets is based on and fairly represents information and supporting documentation prepared by Charles Schaus (CEO of Norwest Minerals Pty Ltd). Mr. Schaus is a member of the Australian Institute of Mining and Metallurgy and has sufficient experience of relevance to the styles of mineralisation and types of deposits under consideration, and to its activities undertaken to qualify as Competent Persons as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr. Schaus consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

#### **Mineral Resource Estimate**

The information in this report that relates to mineral resource estimation is based on work completed by Mr. Stephen Hyland, a Competent Person and Fellow of the AusIMM. Mr. Hyland is Principal Consultant Geologist with Hyland Geological and Mining Consultants (HGMC) and holds relevant qualifications and experience as a qualified person for public reporting according to the JORC Code in Australia. Mr. Hyland is also a Qualified Person under the rules and requirements of the Canadian Reporting Instrument NI 43-101 Mr. Hyland consents to the inclusion in this report of the information in the form and context in which it appears.