

ASX ANNOUNCEMENT 28 April 2022

**ASX: NWM** 

# Follow-up exploration activities underway across new REE, Lithium and IOCG targets at Arunta West

# **Highlights:**

- Commencement of field mapping and rock-chip sampling to improve the definition and understanding of the prospective high-value REE, Lithium and IOCG anomalies at Norwest's Arunta West Project
- Infill soil sampling over a 6km x 2km lithium target at Arunta West to commence in May
- 128-hole (6,400 metre) aircore drilling program across the REE, IOCG and copper-gold anomalies at Arunta West planned for July

**Norwest Minerals Limited** ("Norwest" or "the Company") (ASX: NWM) is pleased to announce the Company's return to Arunta West for field mapping and rock-chip sampling in advance of an upcoming drill program. The work will focus on the REE, lithium and IOCG anomalies recently identified following geochemical analysis of Norwest's comprehensive multi-element soil sample database. The targets will also include several copper-gold anomalies to the southeast on tenement E80/5362. The Arunta West field activities will be followed by infill soil sampling of the lithium zone in May and a 128-hole aircore drilling program across the REE, IOCG, and copper-gold targets in July (See figure 1 for target areas)

Norwest's CEO, Mr. Charles Schaus commented: "Our geological team is on site at Arunta West with mapping and rock-chip sampling underway. The aim is to refine our geological understanding of the new and very prospective REE, lithium and IOCG anomalies. These exciting discoveries have all resulted from geochemical analysis of the ultra-low detection / fine-fraction multi-element assay soil sampling completed in 2021 across the 840km² Arunta West Project. 3,600 soil samples will be taken to infill in and around the 6km x 2km Lithium anomaly in May, followed by 6,400 metres of aircore drilling across the anomalous REE, IOCG and Cu-Au targets.

Geochemical analysis of the Arunta West soils database earlier this year identified anomalous targets prospective for rare earth elements (REE)<sup>1</sup>, LCT pegmatites (lithium)<sup>2</sup>, and iron-oxide-copper-gold (IOCG)<sup>3</sup>.

<sup>&</sup>lt;sup>1</sup> ASX: NWM – Announcement 28 February 2022, 'Significant REE anomaly at Arunta West'

<sup>&</sup>lt;sup>2</sup> ASX: NWM – Announcement 03 March 2022, 'Large LCT pegmatite anomaly at Arunta West'

<sup>&</sup>lt;sup>3</sup> ASX: NWM – Announcement 09 March 2022, 'Arunta West Copper-Gold anomaly detected'

- The REE targets are defined by a 3km zone of elevated & coincident rare earth elements Cerium (Ce), Lanthanum (La) and Yttrium (Y) located at a structural offset along a granite-sediment contact; a geological setting very similar to that hosting the Iceman & Dazzler REE deposits at Browns Range.
- A 6km x 2km lithium target (LCT pegmatite) was identified from wide spaced soil samples collected along a granite-greenstone contact where elevated & coincident Lithium (Li), Tantalum (Ta) and Niobium (Nb) occur.
- The IOCG zone is defined by a 3km x 1.5km copper footprint with an internal 2.5km x 0.5km anomalous gold zone and a suite of elements related to IOCG systems.
- Several copper-gold anomalies on tenement E80/5362 (85%) have also been scheduled for follow-up exploration drilling.

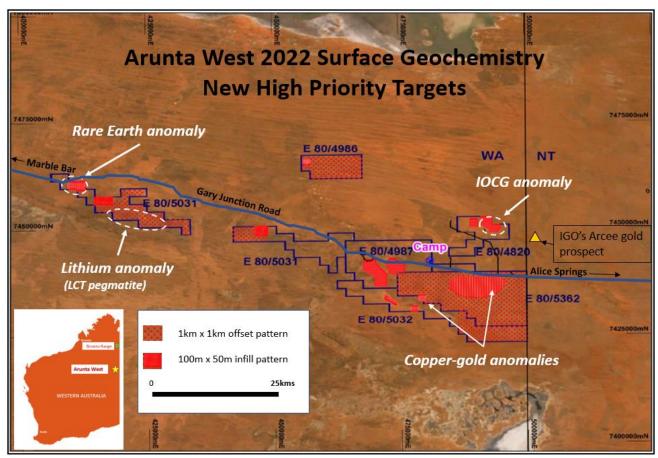


Figure 1 – Arunta West tenements (840km²) showing 2021 soil sample coverage and locations of the new REE, Lithium, IOCG, and Copper-Gold anomalies and the fully maintained Gary Junction Road extending through the project.

### The Rare Earth (REE) Anomaly

Norwest Minerals independent consulting geochemist has identified an area having highly elevated, coincident, rare earth elements Cerium (Ce), Lanthanum (La) and Yttrium (Y) concentrated in zones along a 3km section of the contact between the Mount Webb granites and Bitter Springs sediments. The new rare earth anomaly, which remains open to the west, is located on tenement E80/5031 being 100% held by Norwest.

The geological contact between the Bitter Springs sediments and Mount Webb granite is supported by geophysical evidence including radiometric and magnetic surveys. The geophysics also defines ENE trending structures crossing and disrupting the geological contact. These structural offsets appear to be a focus for the rare earth elements Ce, La and Y.

The location and geological setting of the new REE anomaly is consistent with other rare earth element projects in the Arunta region including the Brown's Range project (Northern Minerals ASX: NTU) located 160kms southeast of Hall Creek in WA and the Nolans project (Arafura ASX: ARU) located at Nolan's Bore 135kms west of Alice Springs in the NT. (See map in figure 2<sup>4</sup>.)

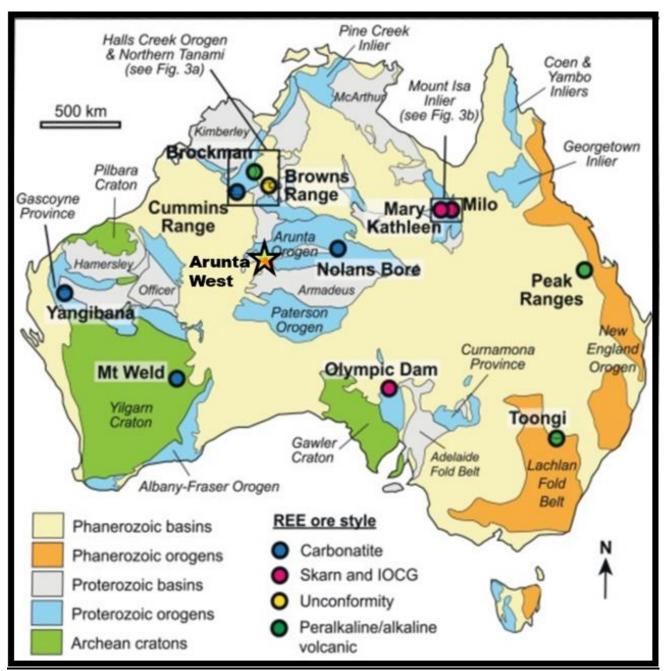


Figure 2 – Map showing location of Arunta West project relative to other hardrock rare earth element deposits in Australia.

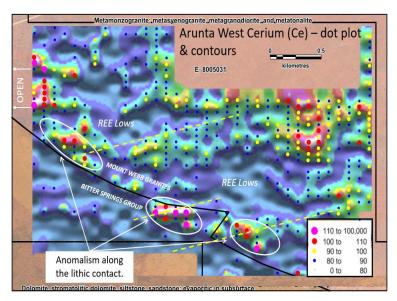
<sup>&</sup>lt;sup>4</sup> Spandler, Carl. "Unconformity-related rare earth element deposits: A new source of critical metals for Australia." YouTube video, 58:22., 07 Dec. 2020. https://www.youtube.com/watch?v=DHmmyMWmwUI

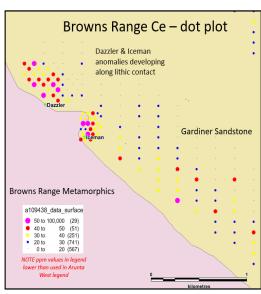
#### An REE Discovery Benchmark

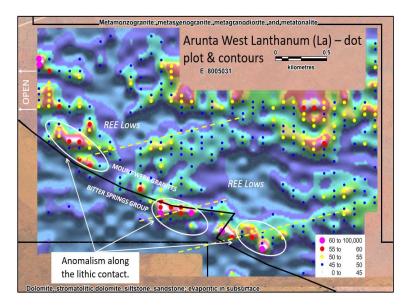
Aspects of the Browns Range Rare Earths Project⁵ were reviewed by Norwest due to its proximity and geologic setting to the new Arunta West rare earth anomaly. The Browns Range operation is located 160kms southeast Halls Creek and in 2019 began producing Heavy Rare Earth Elements from hard rock through its pilot plant.

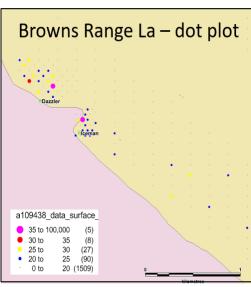
Northern Minerals open file WAMEX report (a109438) from 2013-14 includes Ce, La and Y data from initial soil sampling programmes at Browns Range which led to the identification of the high-grade Dazzler and Iceman REE prospects. Recent follow-up RC drilling at Dazzler has delineated an Inferred Mineral Resource of 0.21Mt @ 2.33 Total Rare Earth Oxides (TREO).

Comparing the Dazzler & Iceman REE prospects to the new Arunta West rare earth anomaly reveals noteworthy similarities including a lookalike geological setting where the higher-grade Ce, La & Y elements are concentrated at disruptions along a major granite/metamorphic -sediment contact. Of interest, is the tenor of the coincident Ce and La surface samples over the Arunta West anomaly being more than double that of the same 'high-grade' elements used to identify the Dazzler and Iceman prospects in 2013-14. See dot plots in figure 3 below.

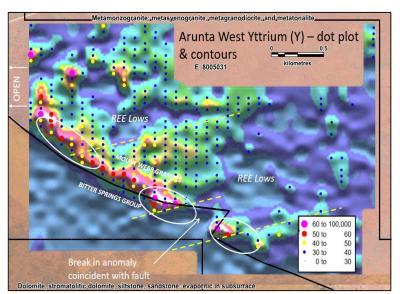








<sup>&</sup>lt;sup>5</sup> ASX: NTU – Announcement 15 February 2022, 'NTU Corporation Presentation – RIU Explorers Conference'



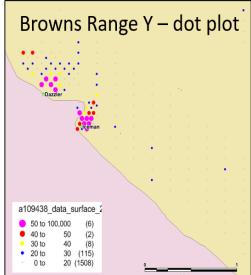


Figure 3 – Arunta West dot & countour plots of REE grades Ce, La, Y (ppm) benchmarked against the Dazzler & Iceman prospect 2013-14 Ce, La & Y discovery grades. Note Arunta West Ce & La tenor is significantly higher than those used to identify Dazzler and Iceman which is apparent when compaing the grade ranges in the respective dot plot legends.

## The Lithium (LCT pegmatite) anomaly

Analysis of the muti-element assay results from widely spaced soil samples collected across tenement E80/5031 (NWM 100%) has highlighted a large 6km x 2km area having zones of coincident and elevated lithium, tantalum, and niobium; all of which are key elements associated with fertile LCT pegmatites. The anomalous LCT-pegmatite zones are situated within the Bittersprings/ Paterson /Heavitree Formation located along the Mount Webb granite contact where regional scale structures crosscut and appear to focus these key elements.

The Company's 2021 regional soil samples were collected on a 700m x 700m offset grid pattern across the LCT pegmatite anomaly and were submitted for a 48 element multi element analysis. The 2021 soils programme was designed by Norwest's consulting geochemist based on his analysis of the 3,000 soil samples collected by the Company in 2019 and his review of previously unexplored areas across Norwest extensive landholding. Follow-up exploration of the new LCT pegmatite anomaly will include mapping, rock chip sampling as well as infill soil sampling on a 200m x 200m diagonal pattern.

## **The IOCG anomaly**

Norwest's geochemist has also identified a 3km x 1.5km copper anomaly with an internal 2.5km x 0.5km gold anomaly. The new copper-gold anomaly is associated with a suite of elevated elements related to iron-oxide-copper-gold (IOCG) systems. The IOCG anomaly is located on a regional structure which extends northwest through IGO's tenement E80/5001 & the Tali-RIO farm-in tenement E80/5423 and to the southeast through the Arcee gold prospect located on the WA-NT boarder 6kms from the new IOCG anomaly. See figure 4.

The Arunta West project area has had no systematic geochemical exploration prior to Norwest's first pass 3000-point regional soil program completed in 2019. This work applied conventional soil sampling techniques and analysed 33 elements. In 2021, the data was reviewed by Norwest's consulting geochemist. Infill and regional soil sampling grids were designed and 6,550 soil samples were collected in mid-2021 using the fine fraction sampling and preparation method. The samples were analysed for 48 elements including ultra-low detection (0.01 ppb) for gold with the final lab assay results reported to Norwest in early 2022.

Ultra-low gold assays from fine-fraction soil samples have proven very successful in identifying anomalous gold targets in the Arunta region including the Arcee gold prospect located 6kms southeast of Norwest's new copper-gold anomaly. Reverse circulation (RC) drilling at Arcee in 2019 returned 12m @ 3.5g/t from 112m from the northwest trending 800m long gold anomaly defined by ≥2ppb gold results<sup>6</sup>. Subsequent soil sampling on a 200m x 400m grid has extended the Arcee gold anomaly from 800m to 2.3km<sup>7</sup> with the anomaly crossing onto IGO's 100% held WA tenement E80/5001. This tenement surrounds Norwest tenement E80/4820 where the new copper-gold anomaly is located.

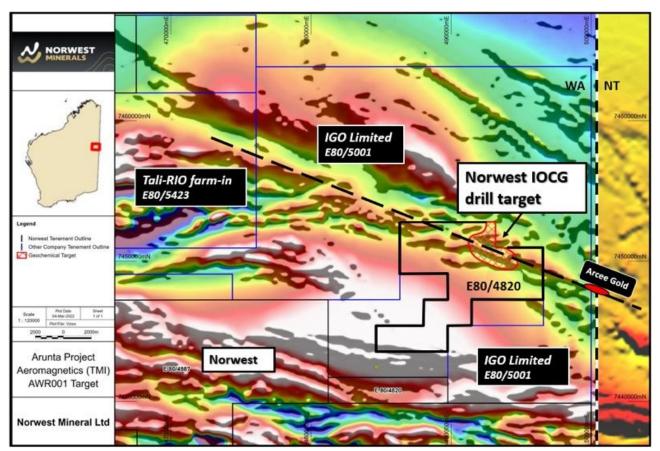


Figure 4 – Location of new copper-gold anomaly and regional structure passing through the Arcee gold prospect to the southeast and tenements held by IGO and Rio to the northwest

## Major resource companies Rio Exploration and IGO recognize Arunta region's potential

Interest in the mineral resource potential of the Arunta region has significantly increased recently with Rio Tinto (ASX: RIO) entering into a staged multi-million-dollar farm-in and joint venture agreement in five tenements held by Tali Resources<sup>8</sup>. Rio-Tali tenement E80/5333 shares ~50kms of boundaries with the Norwest's Arunta West project tenements.

Adjoining the easternmost Arunta West tenements is ground held by the IGO Limited which covers ~15,600km² extending over 300kms from the WA border into the Northern Territory. IGO exploration has identified multiple gold, gold-copper-lead-zinc and nickel-cobalt prospects along the Arunta belt.

<sup>&</sup>lt;sup>6</sup> ASX: PRX - Announcement 16 October 2019, 'Lake Mackay JV Update: New Gold Prospect Identified'

<sup>&</sup>lt;sup>7</sup> ASX: PRX - Announcement 12 December 2019, 'Lake Mackay JV Update'

<sup>&</sup>lt;sup>8</sup> ASX: AMN - Announcement 12 March 2021, 'Tali and Rio Tinto Farm-in Agreement for Metals Exploration'

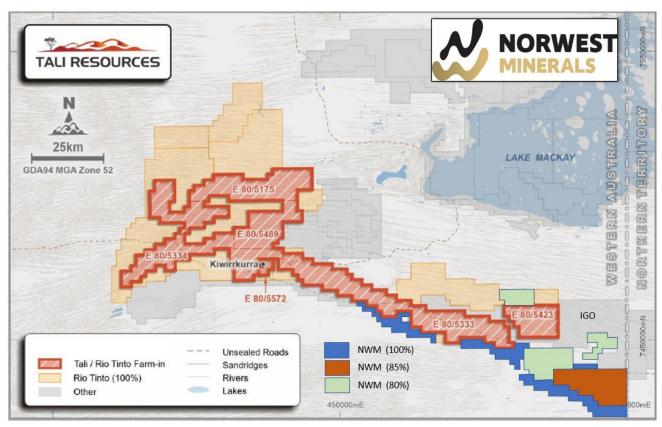


Figure 5 – Tenement map showing where NWM tenements adjoin Rio Tinto's large ground holding. (Map taken from Agrimin 12 March 2021 announcement, modified by Norwest.)

#### **Land Access**

Importantly, all Arunta West project tenements are covered by fully executed Land Access Agreements with the Tjamu Tjamu people and supported by a Mining Entry Permit issued to Norwest in 2021 by the Minister for Aboriginal Affairs.

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

For further information, visit www.norwestminerals.com.au or contact

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#### 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 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.