

ASX Announcement

05 July 2024

ASX:MLS

New Drilling and Exploration Programs Launched for Critical Minerals and Gold Targets in World-Class Australian Mineral Provinces

- A series of new drilling and exploration programs have been launched, testing Critical Minerals and gold targets across three key project areas. These projects all lie along strike from major deposits in world-class mineral provinces in Western Australia and the Northern Territory (see locations, Figure 1).
- The exploration programs at these highly prospective projects, acquired through the purchase of an 80% interest in Payne Gully Gold Pty Ltd¹, include:
- **Initial drilling of un-tested key copper-gold target corridor at the Warrego East Copper-Gold Project within the Tennant Creek Mineral Field (TCMF) in the NT** (see Figure 1), which has historically produced **25Mt @ 6.9 g/t Au and 2.8% Cu²**. The granted Warrego East EL32725 lies directly east of Warrego, the largest historical mine at Tennant Creek, which produced **6.75Mt @ 1.9% Cu, 6.6 g/t Au²**, and covers a fault corridor interpreted from detailed magnetics and the Company's gravity survey that connects Warrego with the Gecko and Orlando copper-gold deposits (past production and resources **11Mt @ 2.3% Cu, 1.8 g/t Au^{2,3}** – see Figure 2). A Mine Management Plan (MMP) has been submitted to the NT Government for approval for an extensive aircore drilling program and follow-up RC/diamond drilling across ironstone hosted copper-gold targets which have not been previously tested. The Company also has four EL applications in the TCMF, all of which sit on key mineralised corridors (see Figures 2 & 3).
 - **Initial drilling of lithium-pegmatite targets on the Warrambie Critical Minerals (Li, Ni-Cu-Co) Project in WA's northwest Pilbara** (see Figure 1). Warrambie is located just 10km east of the major Andover lithium discovery which has produced drilling intersections of up to **209m @ 1.42% Li₂O⁴**. Targets have been defined by detailed gravity and reprocessed magnetics imagery⁵ which are analogous to the Andover geophysical signature but have not previously been tested due to the presence of shallow soil cover. A Program of Work (PoW) has been submitted to the WA Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) for approval to drill a series of aircore drilling traverses and follow-up with RC or diamond drilling across identified lithium pegmatite targets (see Figures 4 & 5). This program is expected to commence during H2 2024.
 - **An aeromagnetic (fixed wing) survey is underway across the granted gold tenements located along strike to the northeast of the 5Moz Big Bell gold deposit in WA's Murchison Gold Province.** (see Figures 1 & 6). The tenements cover a 50km strike length of the regional scale Chunderloo Shear Zone and regional magnetics show potential for greenstone and potentially gold-mineralised splay structures which have not been tested in areas of cover¹. The detailed aeromagnetics will define these targets prior to planned aircore drilling to test bedrock targets.

Metals Australia CEO Paul Ferguson commented:

"These new exploration programs are important steps in advancing our extensive and highly prospective Critical Minerals and gold projects in WA and the NT, which are all located along strike from major deposits in world-class mineralised terranes.

High-quality drilling targets have been identified by our geological team at the Tennant Creek project, east of the high-grade Warrego copper-gold mine, and at our Warrambie project in the northwest Pilbara, which is only 10km east of the major Andover lithium discovery. We have also commenced a detailed aeromagnetic survey across a large project area located directly along strike from the 5-million-ounce Big Bell mine in WA's Murchison district.

With exploration programs across five key projects in Australia and Canada, the second half of 2024 will be an extremely exciting period for the Company as we look to unlock the value of our portfolio."

Metals Australia Ltd (ASX: MLS) is ramping up exploration programs across **Critical Minerals and gold targets** on the three key projects acquired through the purchase of an 80% interest in Payne Gully Gold Pty Ltd (PGG)¹. **The target areas being tested are all located along strike from major mineral deposits** (see Figure 1, below).

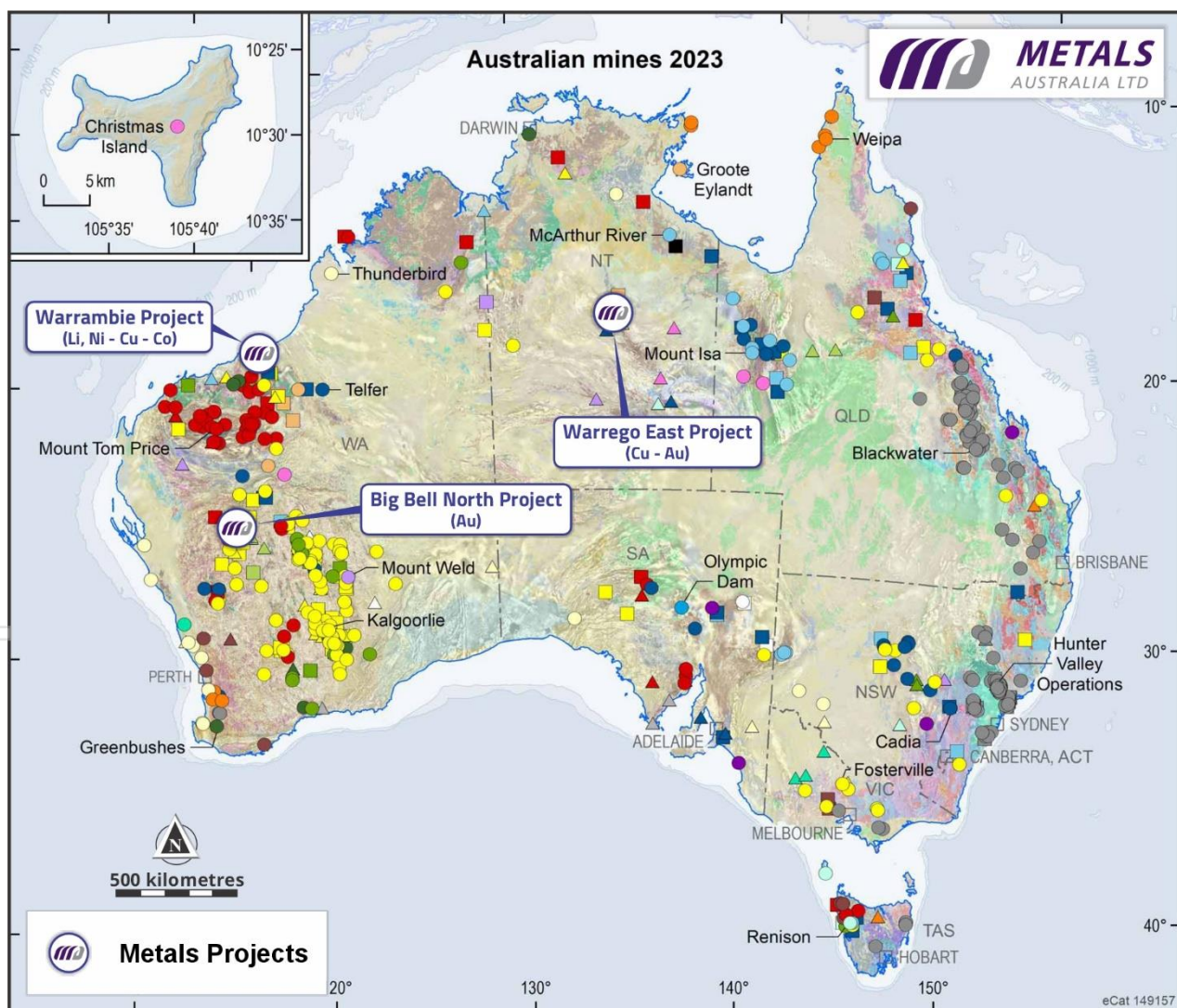


Figure 1: Metals Australia key Critical Minerals and gold exploration projects in world-class mineral terranes (adapted from Geoscience Australia, Australian Mineral Deposits)

Warrego East Copper-Gold Targets, Tennant Creek, NT

The Company's Tennant Creek Project includes granted EL32725 at Warrego East and four EL applications, EL32397, EL32837, EL32410 and the more recent EL33853, located in the Tennant Creek Mineral Field (TCMF) (see Figure 2 below).

The TCMF has produced **25Mt @ 6.9 g/t gold (Au) & 2.8% copper (Cu)** historically², the equivalent of more than **8.5Moz or \$20 billion worth of gold at current prices**, with all production coming from deposits in outcropping areas.

The Company's tenements are located on Cu-Au trends in areas of shallow soil cover which have not been tested with modern exploration. Recent discoveries at Tennant Creek include the "blind" Bluebird discovery of Tennant Minerals Ltd (ASX:TMS) which has produced intersections such as **63m @ 2.1% Cu & 4.6 g/t gold including 27.55m @ 3.6% Cu and 10 g/t Au**⁶. Bluebird is located in an area of shallow cover at the eastern end of the TCMF (see Figure 2 below).

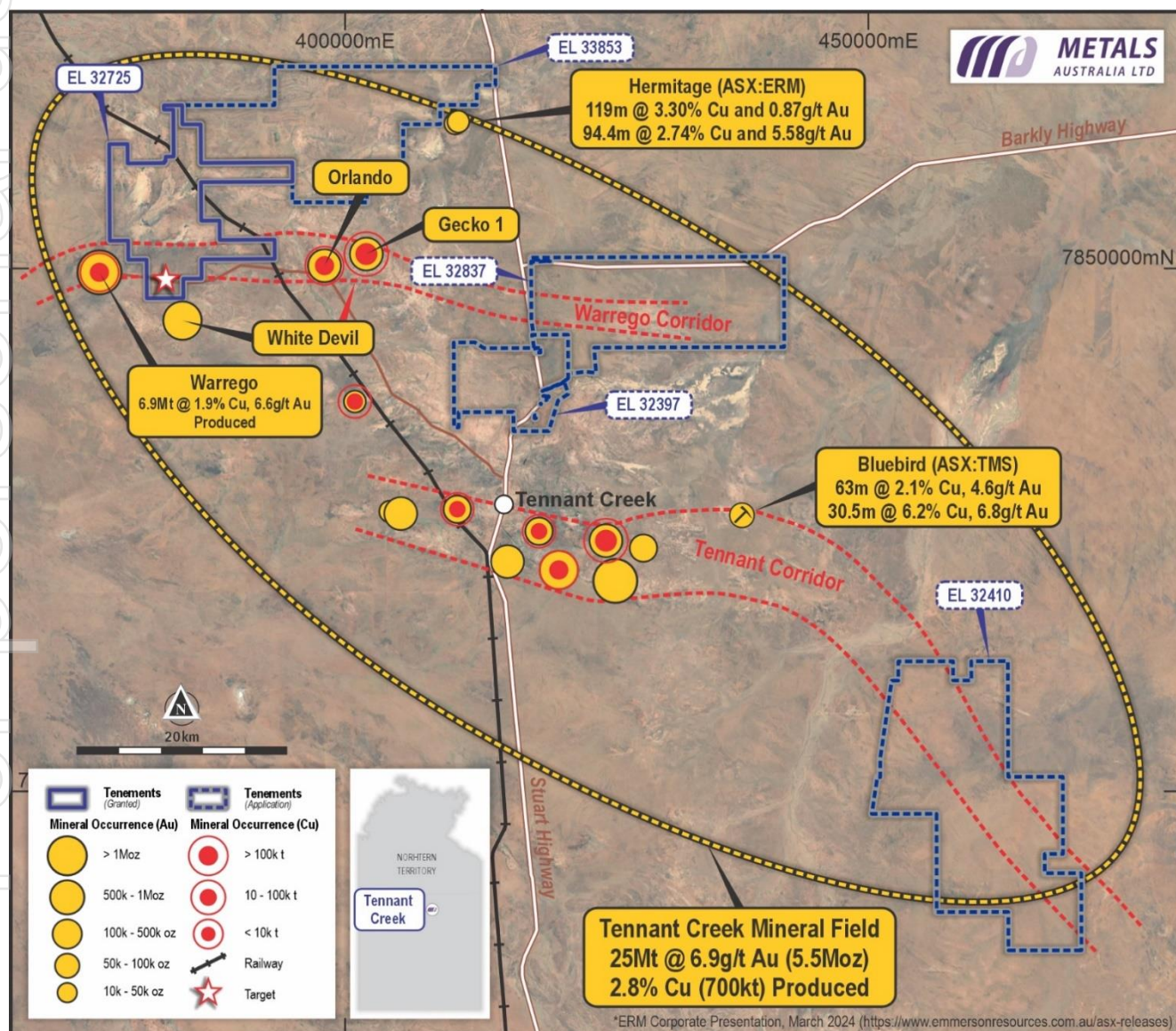


Figure 2: Location of the Company's Tennant Creek tenements with major Cu-Au deposits and targets

The Warrego East tenement, E32725, is located immediately east of the Warrego high-grade copper-gold deposit, which was Tennant Creek's largest historical mine having produced **6.75Mt @ 1.9% Cu, 6.6 g/t Au²**. The Warrego East project sits within a major east-west trending fault corridor interpreted from detailed magnetics and the Company's gravity survey imagery, that connects Warrego with the Gecko and Orlando copper-gold deposits (past production and resources **11Mt @ 2.3% Cu, 1.8 g/t Au^{2,3}**).

The Tennant Creek gold and copper sulphide orebodies are predominantly associated with quartz-magnetite/hematite "ironstone" within the Proterozoic Warramunga Formation. The ironstones and the mineralised structures associated with the deposits can be detected by detailed magnetics and gravity surveys. The Warrego, Orlando and Gecko copper gold deposits are associated with subdued magnetic anomalies (possibly reflecting secondary magnetite and non-magnetic hematite alteration) within the interpreted structural corridor which continues across EL32725 (see Figure 3 below). Re-processing of detailed magnetics imagery shows a series of similar magnetic anomalies within the Company's EL32725 which represent targets for Tennant Creek style copper-gold deposits in areas of shallow soil cover which have not been previously tested.

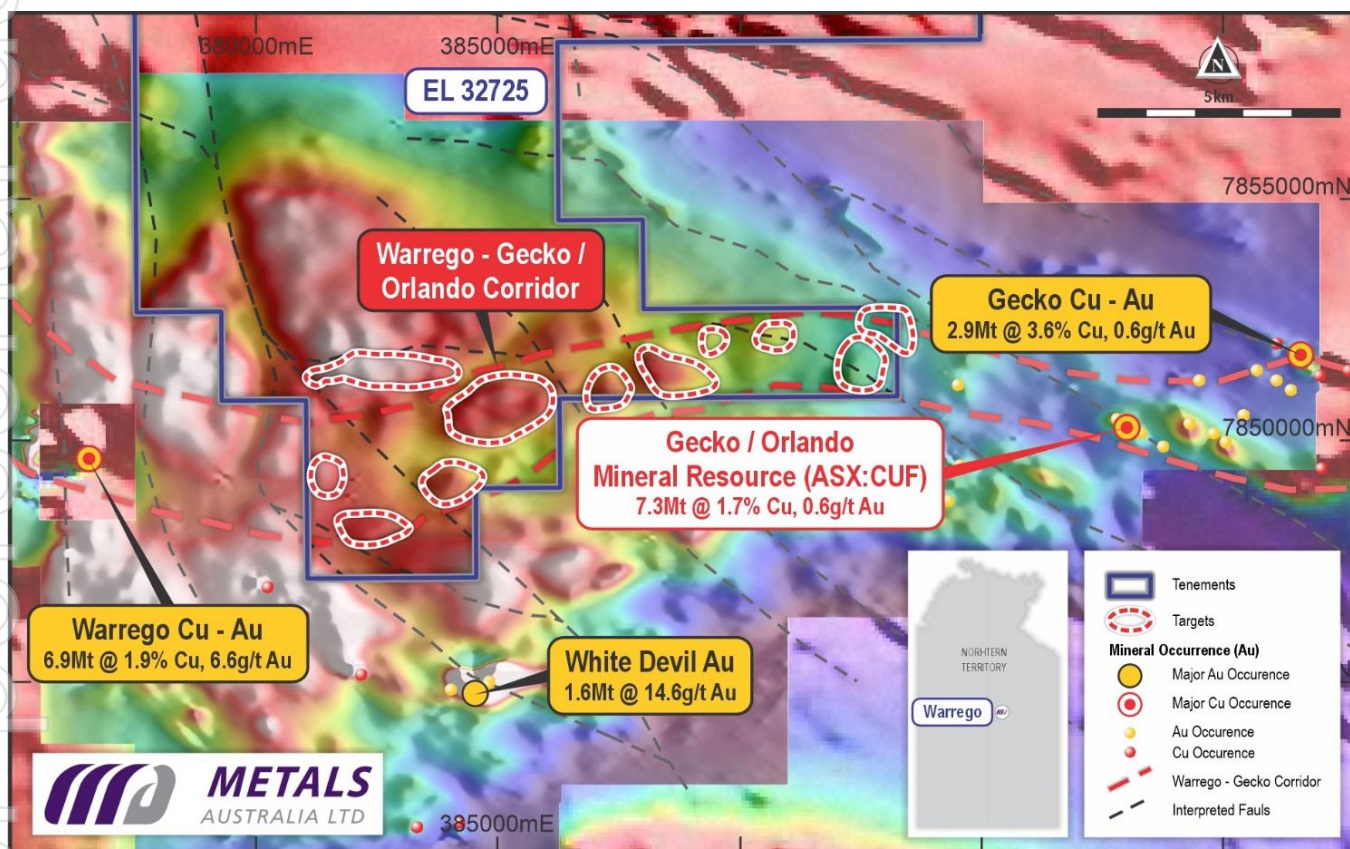


Figure 3: Warrego East EL32725 Total Magnetic Intensity (TMI) with significant Cu-Au deposits and MLS targets.

The Company previously completed a detailed gravity survey within EL32725⁷, which highlighted several anomalies which are partially coincident with the magnetic anomaly targets (Figure 3). The next step is to carry out aircore drilling across these key target zones to test the magnetic and gravity targets within the underlying Warramunga Formation. An MMP has been submitted to the NT Government for approval of an aircore drilling program to test multiple targets within the Warrego-Gecko/Orlando corridor and follow-up RC and/or diamond drilling across the ironstone hosted copper-gold targets. Drilling is expected to commence during H2 2024.

Warrambie Lithium-Pegmatite Targets, Northwest Pilbara, WA

The Company's Warrambie Project (EL47/4327) is located only 10km east of the major Andover lithium discovery⁴ in WA's highly prospective northwest Pilbara region (see Figure 1 and Figure 4 below).

The Andover discovery has generated drilling intersections of up to **209m @ 1.42% Li₂O**⁴ associated with outcropping pegmatites. The geological terrane covered by the 126km² Warrambie project is entirely soil covered with no previous drill-testing of the highly-prospective underlying geology.

Interpretation of regional magnetics over the Warrambie project has identified a series of northeast-trending fault structures which intersect a complex of magnetic mafic intrusive rocks⁵. This is an analogous geological setting to the neighbouring Andover lithium pegmatite cluster – which is associated with a 5km wide, northeast-trending structural corridor in mafic intrusive rocks (see Figure 4 below).

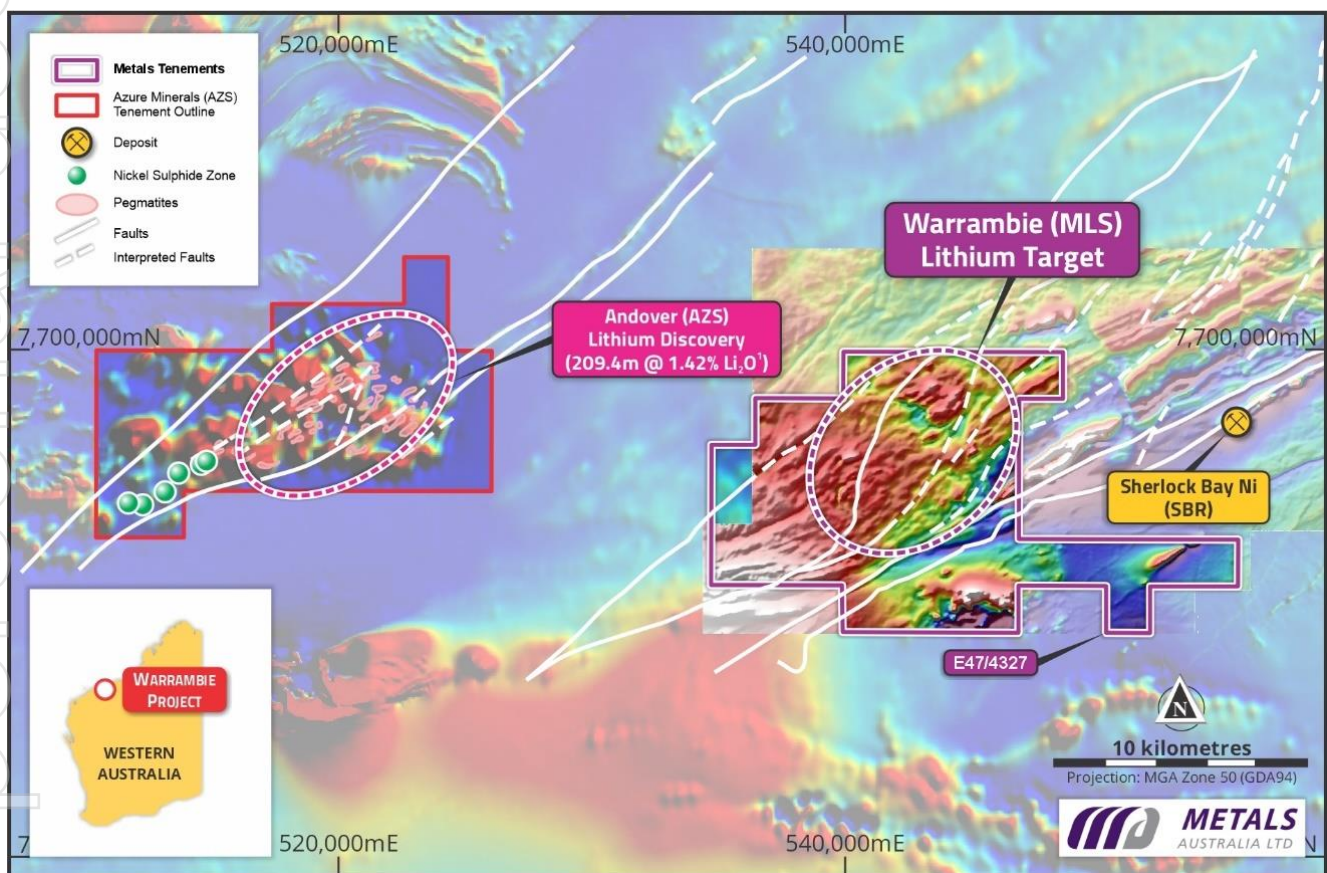


Figure 4: Warrambie Project E47/4327 TMI image, targets and nearby Andover lithium discovery

The Company has re-processed all available detailed magnetics data to fine-tune the interpretation of these key northeast-trending fault structures. Imagery has also been generated from detailed gravity surveys completed by the Company over the Warrambie tenement. The gravity imagery shows **distinct gravity lows within the northeast-trending structures interpreted from the magnetics imagery. These coincident magnetic and gravity lows represent potential lithium-bearing pegmatite clusters under shallow cover** (see Figure 5, below).

The Company now plans an extensive aircore drilling program across the bedrock lithium-pegmatite targets under shallow cover. Significant anomalies identified in the aircore drilling samples will be followed up with deeper RC and/or diamond drilling to test the entire thickness of the identified pegmatite zones.

Other targets at Warrambie include electromagnetic (EM) anomalies associated with mafic intrusives indicated by gravity imagery⁵ (see Figure 5), which are prospective for intrusive related Ni-Cu-Co sulphide deposits.

The Company has submitted a PoW for a series of bedrock aircore drilling traverses and follow up RC and diamond drilling (see Figure 5 for aircore traverse locations). Drilling is expected to commence during H2 2024.

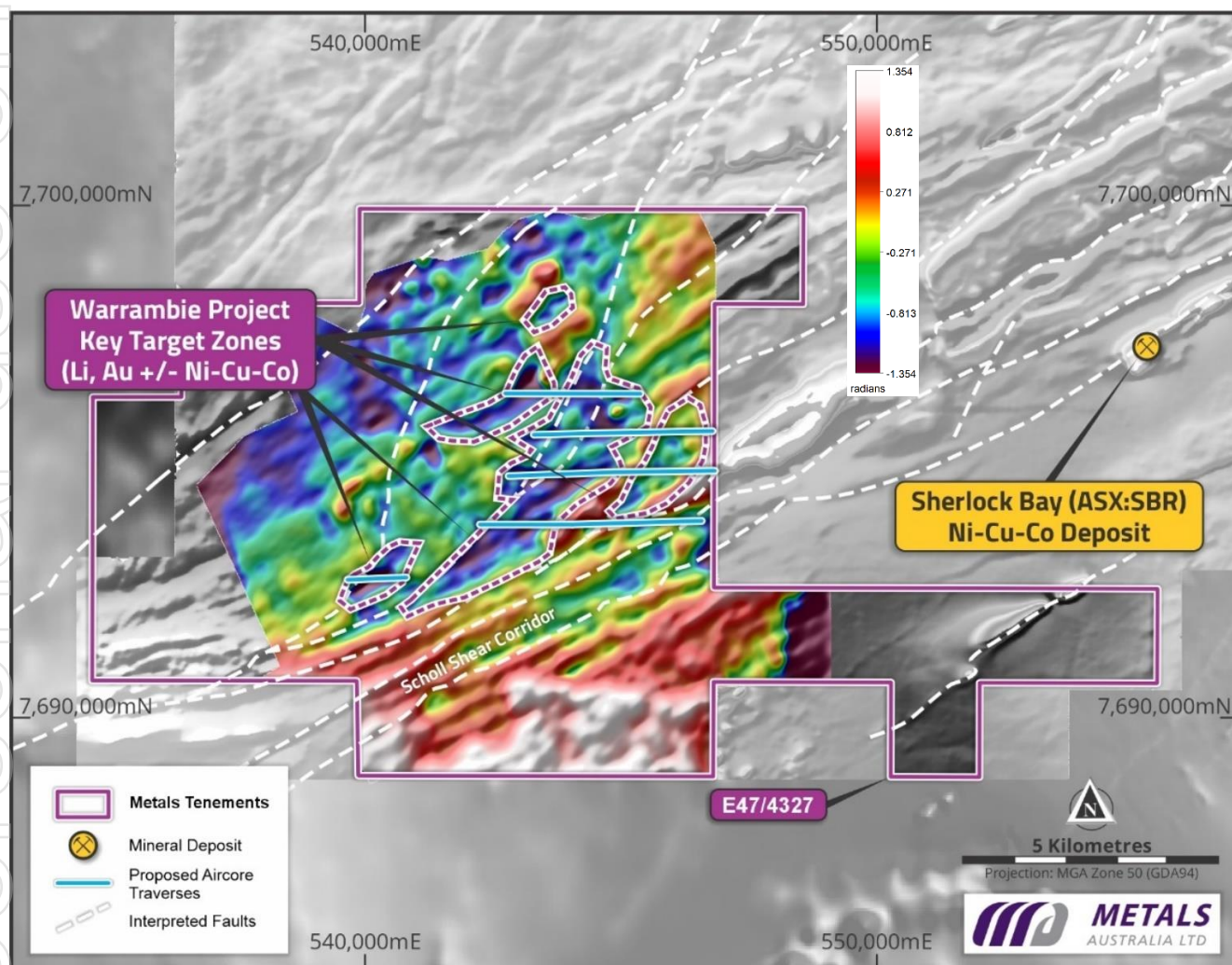


Figure 5: Detailed gravity data imagery with lithium pegmatite targets under cover which are yet to be drill-tested

Big Bell North Targets, Murchison Province, WA

The Big Bell North tenements, EL 51/2058 and EL 51/2059, are located in WA's world-class Murchison Gold Province. The tenements lie within the regional structural corridor that hosts major gold deposits, including the Meekatharra and Mt Magnet gold mining centres⁸ (Figure 6).

The Big Bell north tenements cover an extensive 337km² across the northwestern margin of the regional scale Chunderloo Shear Zone (see Figure 6 below). The **Big Bell Gold deposit, which has produced over 5 million ounces of gold⁸**, is located 50km along strike to the southwest within this regional scale and highly-prospective corridor, highlighting the potential within these tenements for major gold deposits.

Very little previous exploration has been carried out within the Big Bell North tenements due to extensive soil cover and the lack of recognition of greenstone lithologies. Interpretation of regional magnetics imagery shows

magnetic anomalies, likely associated with buried greenstones, which are intersected by prospective splay-fault structures that are interpreted from magnetics imagery to extend under sediment cover in untested areas. These buried greenstone and splay-fault targets are in an analogous setting to the Big Bell gold deposit to the south and Garden Gully gold mining centre to the north of the project area.

The Company has commenced a large scale and detailed aerial magnetics survey (fixed wing) over the identified gold target areas within these key tenements. The magnetics will define the buried greenstone and splay-fault structures and allow the Company to plan aircore drilling to bedrock to test these targets for buried gold deposits.

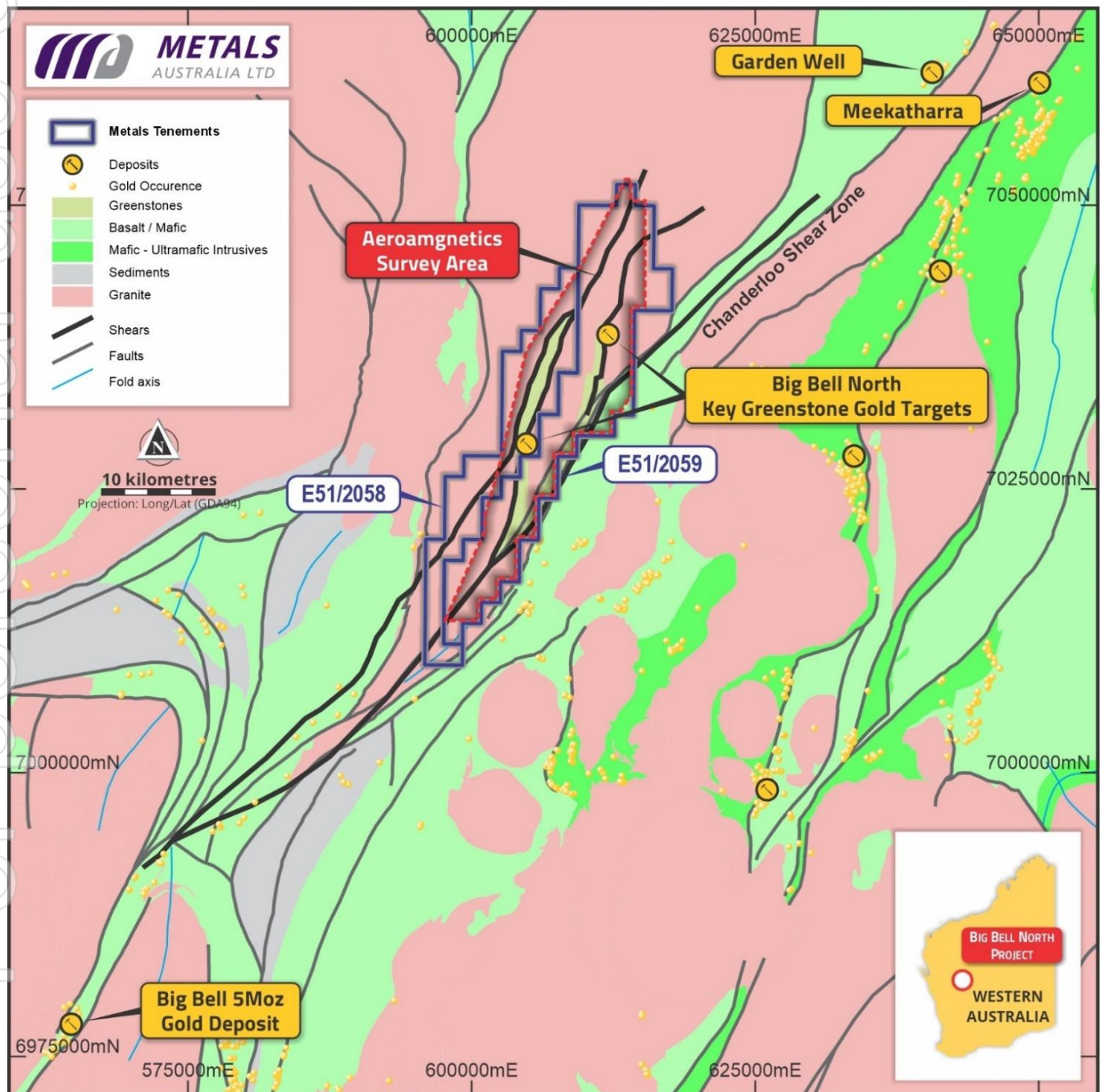


Figure 6: Metals' Murchison tenements, located 50km along strike northeast of the 5Moz Big Bell deposit

ABOUT METALS AUSTRALIA

Metals Australia Ltd (ASX: MLS) has a proven track record of **Critical Minerals and metals discovery** and a quality portfolio of advanced exploration and pre-development projects in the highly endowed and well-established mining jurisdictions of Quebec – Canada, and Western Australia and the Northern Territory.

The Company is focused on the exploration and development of its flagship **Lac Carheil high-grade flake-graphite project** in Quebec (formerly Lac Rainy graphite project), a high-quality project which is well placed for the future delivery of premium, battery-grade graphite to the North American lithium-ion/EV battery market, and other flake-graphite products.

The Company recently announced widespread and exceptionally high-grade graphite sampling results from Lac Carheil, including **10 results of over 20% Cg and averaging 11% Cg across a 36km strike-length of graphitic trends identified within the project**⁹. The existing Mineral Resource of **13.3Mt @ 11.5% Cg** (including Indicated: **9.6Mt @ 13.1% Cg** and Inferred: **3.7Mt @ 7.3% Cg**)¹⁰ has been defined from just 1km strike-length of drill-testing of the Carheil Trend. An extensive new drilling program is planned to test priority new high-grade zones identified from the sampling program and to significantly upgrade and expand the Lac Carheil Mineral Resource.

The Company has commenced an extensive further testwork program on Lake Carheil, building on previous work which generated high-grade **flotation concentrate results of up to 97% graphitic carbon (Cg)**¹¹, including 24% in the large flake category. Subsequent **spherical graphite (SpG) battery testwork produced high-quality battery grade (99.96% Cg) SpG**¹² and electrochemical (battery charging and durability) tests showed **excellent charging capacity and outstanding discharge performance and durability**¹³. The Company has also commissioned Lycopodium to complete a pre-feasibility Study (PFS) on flake-graphite concentrate production and Anzaplan to carry out a scoping study on downstream battery-grade SpG production¹⁴.

Metals' is also advancing its lithium and gold exploration projects in the world-class James Bay region of Quebec at the **Corvette River Project**¹⁵. The Company discovered **lithium-bearing pegmatites immediately along strike from Patriot Battery Metals' world-class lithium pegmatite discoveries**, as well as a new LCT pegmatite trend at Corvette South, parallel to Patriot's Corvette Lithium Trend¹⁶. Several high-grade gold targets have also been identified on these tenements and the Company has a fully permitted drilling program planned to test both the lithium and gold targets as soon as possible¹⁷.

The Company's other key projects include its advanced **Manindi Critical Minerals Project** in the Murchison district of Western Australia, where metallurgical testwork has located spodumene in samples from a high-grade lithium intersection of **12m @ 1.38% Li₂O** including **3m @ 2.12% Li₂O**¹⁸. The Company also has a high-grade zinc Mineral Resource and a new vanadium-titanium discovery at the Manindi Project.

This release provides details of three key copper, gold and Critical Minerals exploration projects in the in world-class mineral provinces in the Northern Territory (NT) and Western Australia (WA)¹. These projects include the **Warrambie project**⁵, located just 10km east of Azure Minerals' (ASX:AZS) Andover lithium discovery in Western Australia's northwest Pilbara region, **which has produced drilling intersections of up to 209.4m @ 1.42% Li₂O**⁴. The other key projects are **tenements in the Tennant Creek copper-gold province** in the Northern Territory, including a large granted exploration licence immediately to the east of the Warrego high-grade copper-gold deposit (production **6.75Mt @ 1.9% Cu, 6.6 g/t Au**²) and large exploration licences in Western Australia's **Murchison Province**, along strike from the >5Moz Big Bell gold deposit^{1,8}.

REFERENCES

- ¹ Metals Australia Ltd, 17 August 2022. Key Battery Metals Projects Acquired on Discounted Terms.
- ² Portergeo.com.au/database/mineinfo. Tennant Creek - Gecko, Warrego, White Devil, Nobles Nob, Juno, Peko, Argo
- ³ CuFe Ltd (ASX:CUF), 03 April 2023. Tennant Creek Project JORC 2012 Resource Statement.
- ⁴ Azure Minerals Ltd (ASX:AZS), 4th August 2023. 209m High-Grade Lithium Intersection at Andover.
- ⁵ Metals Australia Ltd, 07 December 2023. Lithium Program Commenced at Warrambie, 10km East of Andover.
- ⁶ Tennant Minerals (ASX:TMS), 17 August 2022: 63m @ 2.1% Copper and 4.6 g/t Gold Intersected at Bluebird.
- ⁷ Metals Australia Ltd, 28 April 2023. Quarterly Activities Report for the Quarter Ended 31 March 2023.
- ⁸ Portergeo.com.au/database/mineinfo.asp?mineid=mn238. Big Bell, Western Australia. 31 December 2018.
- ⁹ Metals Australia Ltd, 16 January 2024. Exceptional 64.3% Graphite and New Drilling at Lc Rainy.
- ¹⁰ Metals Australia Ltd, 15 June 2020. Metals Australia delivers High Grade Maiden JORC Resource at Lac Rainy.
- ¹¹ Metals Australia Ltd, 30 June 2020. Metallurgical Testing Confirms Lac Rainy Graphite High Purity and Grade.
- ¹² Metals Australia Ltd, 28 February 2023. Battery grade 99.96% Spherical Graphite for Lac Rainy.
- ¹³ Metals Australia Ltd, 23 May 2023. Outstanding Battery Test Results for Lac Rainy Graphite.
- ¹⁴ Metals Australia Ltd, 8 May 2024. Major Contracts Awarded to Advance Lac Rainy.
- ¹⁵ Metals Australia Ltd, 02 October 2023. 63 Pegmatite Samples from Corvette River Tenements in Lab.
- ¹⁶ Metals Australia Ltd, 02 October 2023. LCT Pegmatite Discovery with High-Lithium on New Trend.
- ¹⁷ Metals Australia Ltd, 21 May 2024. Permitted to Drill Key Au, Agg & Li Targets Corvette River
- ¹⁸ Metals Australia Ltd, 19 July 2022. Exceptional Lithium Pegmatite Intersections at Manindi.

This announcement was authorised for release by the Board of Directors.

*****ENDS*****

For further information, please refer to the Company's website or contact:

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ASX LISTING RULES COMPLIANCE

In preparing this announcement the Company has relied on the announcements previously made by the Company listed under "References". The Company confirms that it is not aware of any new information or data that materially affects those announcements previously made, or that would materially affect the Company from relying on those announcements for the purpose of this announcement.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING INFORMATION

This document contains forward-looking statements concerning Metals Australia Limited. Forward-looking statements are not statements of historical fact and actual events, and results may differ materially from those described in the forward-looking statements as a result of a variety of risks, uncertainties, and other factors. Forward-looking statements are inherently subject to business, economic, competitive, political and social uncertainties and contingencies. Many factors could cause the Company's actual results to differ materially from those expressed or implied in any forward-looking information provided by the Company, or

on behalf of, the Company. Such factors include, among other things, risks relating to additional funding requirements, metal prices, exploration, development and operating risks, competition, production risks, regulatory restrictions, including environmental regulation and liability and potential title disputes.

Forward looking statements in this document are based on the company's beliefs, opinions and estimates of Metals Australia Limited as of the dates the forward-looking statements are made, and no obligation is assumed to update forward looking statements if these beliefs, opinions and estimates should change or to reflect other future developments.

COMPETENT PERSON STATEMENT

The information in this report that relates to exploration results, Mineral Resources and Exploration Targets has been reviewed, compiled and fairly represented by Mr Jonathon Dugdale. Mr Dugdale is a Technical Advisor to Metals Australia Ltd and a Fellow of the Australian Institute of Mining and Metallurgy ('FAusIMM'). Mr Dugdale has sufficient experience, including over 35 years' experience in exploration, resource evaluation, mine geology and finance, relevant to the style of mineralisation and type of deposits under consideration to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee ('JORC') Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. Mr Dugdale consents to the inclusion in this report of the matters based on this information in the form and context in which it appears.