

ASX Announcement 30 January 2024

ASX:MLS

Priority Andover Look-Alike Lithium Drilling Targets Identified from Detailed Geophysical Surveys at Warrambie

- Metals Australia has generated a series of Andover look-alike targets from initial detailed gravity surveying and re-processing of magnetics at its Warrambie project, 10km east of the world-class Andover lithium project¹ in WA's highly-prospective northwest Pilbara region (Figure 1, below).
- Ongoing detailed gravity and passive seismic survey programs at Warrambie have already identified three key gravity lows within the higher-density mafic package (see Figure 2) - indicating potentially lithium-bearing pegmatite intrusions in an identical setting to the Andover discovery¹ (see Figure 1).



Figure 1: MLS Warrambie Project, 10km east of Andover Lithium Discovery, on re-processed magnetics imagery

- > The new targets are in un-tested areas of soil cover and are also highly-prospective for gold associated with structures intersecting mafic rocks.
- Program of Work (PoW) approval being sought for an initial drilling program to test these new priority lithium and gold targets.

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Metals Australia Limited (ASX: MLS) (Metals Australia or "the Company") is pleased to report the Company has generated a series of new Andover look-alike drilling targets from ongoing geophysical surveys at its Warrambie project (E47/4327), 10km east of Azure Minerals' (ASX:AZS) Andover lithium project in Western Australia's highly prospective northwest Pilbara. (see Figures 1 and 2).

Interpretation of regional magnetics over Warrambie has identified a series of northeast-trending fault structures which intersect a complex of magnetic mafic intrusive rocks³. This is a near-identical 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 1). The Company has re-processed all available detailed magnetics data to fine-tune the interpretation of these key northeast-trending fault structures.

Ongoing detailed gravity surveys being conducted at Warrambie have now covered about 60% of the target zone. Processing and imaging of the initial gravity data has shown distinct gravity lows within the northeast-trending structures, which are considered potential lithium-bearing pegmatite clusters under shallow cover (see Figure 2).



Figure 2: Detailed gravity data imagery in colour on re-processed magnetics in grey-scale showing key magnetic and gravity low lithium pegmatite and gold targets under cover which are yet to be drill-tested



The geological terrane covered by the 126km² Warrambie project is entirely soil covered with no previous drill-testing of the highly-prospective underlying geology. The geological setting is similar to Andover and is also considered prospective for gold and other battery metals such as nickel, copper and cobalt.

The lithium-bearing pegmatites targeted are more resistant to erosion and would likely represent buried palaeo-ridges which occur closer to the surface than the surrounding rocks.

Upon completion of the detailed geophysical programs, the Company will commence aircore drilling programs across key bedrock lithium-pegmatite targets and gold targets under shallow cover.

Significant anomalies identified in the aircore drilling samples will be followed up with deeper reversecirculation (RC) and/or diamond drilling to test the entire thickness of the identified pegmatites or goldbearing zones.

These drilling programs will commence as soon as the Program of Work (POW) application being submitted to the WA Department of Mines, Industry, Regulation and Safety (DMIRS) is approved.

The Warrambie project was acquired through the purchase by Metals Australia of an 80% stake in Payne Gully Gold Pty Ltd².

ABOUT METALS AUSTRALIA

Metals Australia Ltd (ASX:MLS) is advancing a quality portfolio of battery minerals and metals projects in the highly-prospective and mining-friendly jurisdictions of Western Australia and Quebec, Canada.

The Company's development focus is the flagship Lac Rainy high-grade flake-graphite project in Quebec, which is well placed for the future delivery of premium, battery grade graphite to the North American lithium-ion / EV battery market. The Company recently announced widespread and exceptionally high-grade graphite sampling results from Lac Rainy, including a sample containing 63% graphitic carbon (Cg)⁴ from a large EM anomaly west of the existing Mineral Resource of 13.3Mt @ 11.5% Cg⁵. The sampling also produced 10 results of over 20% Cg and averaged 11% Cg across a 36km strike-length of graphitic trends identified within the project. An extensive new drilling program is planned to test priority new high-grade zones identified from the sampling program to significantly upgrade and expand the Lac Rainy Mineral Resource.

Metallurgical test work on the Lac Rainy project has generated high-grade flotation concentrate results of up to 97% graphitic carbon (Cg)⁶. A bulk flake-graphite concentrate tested in Germany produced **premium battery grade 99.96% Cg purity spherical graphite**⁷. Electrochemical (battery) tests confirmed Lac Rainy spherical graphite is premium-quality lithium-ion battery anode material with exceptional battery charging capacity and outstanding discharge performance and durability⁸. The Company will complete a Pre-Feasibility Study (PFS) on production of high-grade flake-graphite concentrate and a separate study on battery-grade spherical graphite production to feed the North American lithium-ion battery anode market.

The Company is also advancing its lithium exploration projects at **Corvette River**⁹ in the world-class James Bay lithium region of Quebec, where it has discovered LCT 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 Trend**¹⁰.

The Company's other key projects include its advanced **Manindi battery minerals and metals 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**¹¹. The Company also has a high-grade zinc Mineral Resource and a new vanadium-titanium discovery at the Manindi Project.

Metals Australia is also carrying out an aggressive exploration program targeting lithium-pegmatites under shallow cover³ at the **Warrambie project**, 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% Li₂O¹.

Also through the Payne Gully Gold acquisition², the Company has an 80% stake in copper-gold exploration 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 Au¹²**) and large exploration licences in Western Australia's **Murchison Province**, along strike from the >5Moz Big Bell gold deposit².

REFERENCES

¹ Azure Minerals Ltd (ASX:AZS), 4^h August 2023. 209m High-Grade Lithium Intersection at Andover.

² Metals Australia Ltd, 17 August 2022. Key Battery Metals Projects Acquired on Discounted Terms.

³ Metals Australia Ltd, 07 December 2023. Lithium Program Commenced at Warrambie, 10km East of Andover.

⁴ Metals Australia Ltd, 16 January 2024. Exceptional 64.3% Graphite and New Drilling at Lc Rainy.

⁵ Metals Australia Ltd, 15 June 2020. Metals Australia delivers High Grade Maiden JORC Resource at Lac Rainy.

⁶ Metals Australia Ltd, 30 June 2020. Metallurgical Testing Confirms Lac Rainy Graphite High Purity and Grade.

⁷ Metals Australia Ltd, 28 February 2023. Battery grade 99.96% Spherical Graphite for Lac Rainy.

⁸ Metals Australia Ltd, 23 May 2023. Outstanding Battery Test Results for Lac Rainy Graphite.

⁹ Metals Australia Ltd, 02 October 2023. 63 Pegmatite Samples from Corvette River Tenements in Lab.

¹⁰ Metals Australia Ltd, 02 October 2023. LCT Pegmatite Discovery with High-Lithium on New Trend.

¹¹ Metals Australia Ltd, 19 July 2022. Exceptional Lithium Pegmatite Intersections at Manindi.

¹² Portergeo.com.au/database/mineinfo. Tennant Creek - Gecko, Warrego, White Devil, Nobles Nob, Juno, Peko, Argo

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.



Appendix 2: JORC Code, 2012 Edition – Table 1 Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area. 	 The Warrambie Exploration Licence, E47/4327 was granted on the 24th August 2020 and has an expiry date of expiry date of 24/08/2025. MLS has an 80% beneficial interest in the project through its acquisition of an 80% stake in Payne Gully gold Pty Ltd
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 The area within EL47/4327 has been held continuously since the 1960s and explored for gold, base metal, nickel and PGE mineralisation. Despite being held for many years there has been limited effective exploration due to extensive areas of cover, and as a result the area remains prospective for a range of minerals. In the 1960s, exploration was focussed on iron, titanium and vanadium by Australian Inland Exploration (AIE) and Mangore Australia. In the late 1960s and 1970s the focus shifted to nickel and copper following the discovery of the Sherlock Bay Nickel Deposit by AIE with additional exploration conducted by Texasgulf Australia and Utah Development in the area. With an increase in the gold price in the 1980s there was an increased focus on gold but also platinum and palladium with large programs conducted by Hunter Resources and Dominion. In the 1990s companies such as Dragon Resources, Outokumpu and KKR continued the exploration for nickel, copper and PGEs. From 2000 onwards Sherlock Bay Nickel (Australian Resources Ltd) conducted resource drilling and a feasibility study on the Sherlock Bay Nickel Deposit with limited regional exploration including targeting of magnetic anomalies within the Warrambie ELA47/4327 area, however no drilling was conducted.
Geology	 Deposit type, geological setting and style of mineralisation. 	 The project is hosted within the Archaean West Pilbara Granite-Greenstone Belt. It is highly prospective for mafic intrusion related nickel-copper-cobalt (Ni-Cu-Co) sulphide mineralisation, being centrally located between the Sherlock Bay nickel (Cu-Co) sulphide deposit 30km to the northeast, and the Andover massive to disseminated nickel (Cu-Co) sulphide deposit and major lithium discovery, 30km to the west (see Figure 1).



Criteria	JORC Code explanation	Commentary
Drill hole information	 A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	 No drilling or geochemical sampling reported in this release.
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated. Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal activity of the procedure should be approximate. 	 No drilling or geochemical sampling reported in this release.
Relationship	equivalent values should be clearly stated. These relationships are particularly important in the	No drilling or geochemical sampling reported
between mineralisation widths and intercept lengths	 Provide the report of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g., down hole length, true width not known'). 	in this release.
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	• A regional location plan on regional magnetics is shown as Figure 1 and the location and imagery from the reprocessed magnetics and the gravity survey are shown ion Figure 2.
Balanced Reporting	 Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results. 	 No drilling or geochemical sampling reported in this release.
Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples - size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	 A detailed gravity survey is in progress over part of the of the Warrambie tenement (see gravity imagery, Figure 2) using standard gravitometer on a 200m x 50m grid.



Criteria	JORC Code explanation	Commentary
Further work	 The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large- scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 An aircore drilling program will be carried out across soil covered gravity and magnetic low targets to detect bedrock lithium-bearing pegmatites as well as gold and nickel-copper- cobalt sulphide mineralisation (see Figure 2). Further drilling (RC and/or diamond drilling) will be carried out subject to the results of the aircore drilling program.