

ASX ANNOUNCEMENT



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AEROMAGNETIC SURVEY CONFIRMS POTENTIAL MANGANESE TARGETS AT WOODIE WOODIE NORTH

Highlights:

- Airborne magnetic survey reveals an extensive/complex magnetic corridor measuring approx. 8.0 km x 2.0 km
- Survey outlines multiple structures coincident with the source area and with surface geochemistry
- Historical surface sampling has highlighted clear manganese potential with grades up to 52% Mn and Co 250ppm
- Pre-drilling detailed surface mapping is now underway
- 12 priority targets have been identified maiden drilling campaign is planned later this year
- Nearby mines include the Woodie Woodie (Consolidated Minerals Pty Ltd) manganese mine (approximately 50 km to the southeast)

Critical metals exploration and development company **MetalsGrove Mining Limited** (ASX: **MGA**), ("**MetalsGrove**" "**MGA**" or the "**Company**"), is pleased to announce that a recently completed airborne magnetic survey has confirmed a large magnetic corridor of interest at the Company's Woodie Woodie North Manganese Project in Western Australia.

The airborne geophysical survey has highlighted multiple structures coincident with the source area and with surface geochemistry (see Figure 1 below).

The results of the magnetic and radiometric survey, coupled with the preexisting geochemistry data, provides a suite of compelling targets as the Company advances towards a maiden drilling program planned later this year.

Commenting on the latest exploration at Woodie Woodie North, MetalsGrove's Managing Director, Sean Sivasamy said:

"We are delighted with the outcomes from this detailed survey which has significantly improved our technical understanding of the Woodie Woodie North Project and highlighted several compelling drill targets.

We are moving quickly to finalise all necessary approvals as we target our maiden drilling campaign at Woodie Woodie North later this year.

MetalsGrove is also rapidly advancing exploration across its other priority tenements in WA and the Northern Territory, namely Upper Coondina and Arunta, in what is shaping up as a very busy finish to the calendar year."

Survey Background

During August 2022, Thomson Airborne Surveys Pty Ltd completed a detailed airborne magnetic and radiometric survey to test the Company's Woodie Woodie North Manganese (Mn) Project. The survey included an area with previously defined Mn geochemical anomalies.

Preliminary data has been interpreted and final data will be processed and interpreted shortly. This will include modelling if required to assist confirmation of source spatial location/geometry.

A total of 24 anomalies were picked and ranked from enhanced imagery. From these, 12 priority main initial targets were delineated. Further, of these targets, six stand out as extensive and are associated with the broad conductor identified from the electromagnetic and radiometric regional AEM survey.

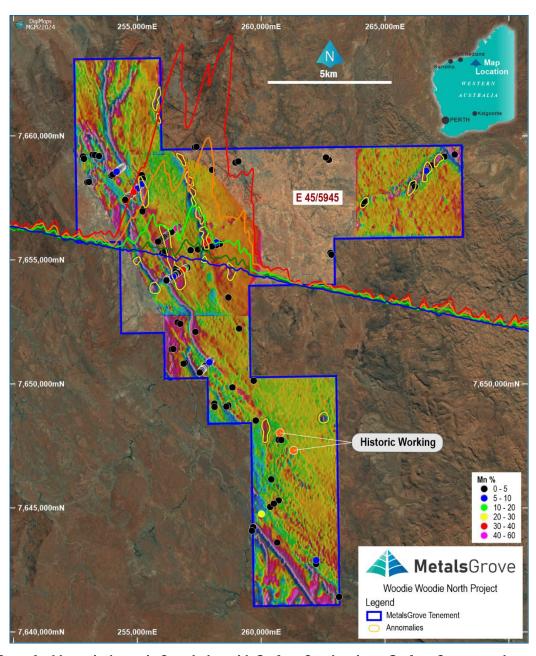


Figure 1 - Magnetic Anomaly Correlation with Surface Geochemistry, Surface Outcrop and AEM broad conductor at Woodie Woodie North

These targets cover approximately 8km of the "Magnetic Signature" interpreted to lie along the eastern and western complex in its Rippon Valley target area. It is worth noting that geochemical trend and magnetic anomalism coincide at Rippon Valley.

A number of both discrete and elongated magnetic anomalies of potential Mn exploration interests have been highlighted by this recent detailed aeromagnetic surveying, elongated anomalies are curvilinear in nature with clear structural breaks/disruptions within the broader corridor.

Of particular interest is the eastern magnetic trend which has clear Mn mineralisation present at its southern extremity (Figure 2). Two intrusive type magnetic anomalies were also highlighted and warrant further investigation.

Follow-up ground investigation is required to further rank target areas/trends and then most likely additional geophysical surveys such as passive or active AEM or ground IP will be required to refine highest priority prospects for drill targeting.

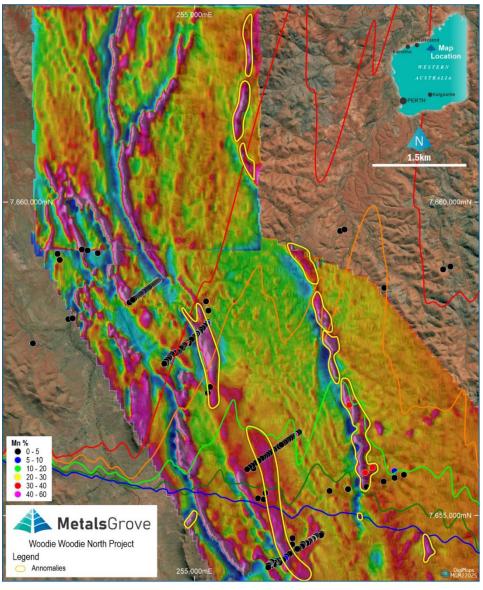


Figure 2 - Magnetic Anomaly Correlation with Surface Geochemistry, Surface Outcrop and AEM broad conductor Target Area at Woodie Woodie North - RTPIVD Aeromagnetic Imagery overlaying Satellite Imagery

Woodie Woodie North Project Background

The Woodie Woodie North Manganese Project which comprises a single granted Exploration Licence (E 45/5945), is located approximately 100 km east of Marble Bar in the eastern Pilbara region. The tenement covers an area of approximately 13,740 ha.

Nearby mines include the Woodie Woodie (Consolidated Minerals Limited) manganese mine (approximately 50 km to the southeast) and its well-connected world-class infrastructure.

About MetalsGrove

MetalsGrove Mining Limited (ASX: MGA) is an Australian-based exploration and development company, focused on the exploration and development of its portfolio of high-quality lithium, rare earth, copper-gold, manganese and base metal projects in Western Australia and the Northern Territory.

MGA is committed to green metal exploration and development to meet the growing demand from the battery storage and renewable energy markets in the transition to a de-carbonised world.

Competent Person Statement – Exploration Strategy

The information in this announcement that relates to exploration strategy and results are based on information provided to and compiled by Sean Sivasamy who is a Member of The Australian Institute of Mining and Metallurgy. Mr Sivasamy is Managing Director and CEO of MetalsGrove Mining Limited.

Mr Sivasamy has sufficient experience which is relevant to the style of mineralisation and exploration processes as reported herein to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

The information in this announcement that relates to Geophysical interpretations was provided by Mr Russell Mortimer of Southern Geoscience Consultants who is a Member of The Australian Institute of Geoscientists.

Mr Mortimer has sufficient experience which is relevant to the style of mineralisation and exploration processes reported herein to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

Mr Sivasamy and Mr Mortimer both consent to the inclusion in this announcement of the information contained herein, in the form and context in which it appears.

Forward looking statements

This announcement may contain certain "forward looking statements" which may not have been based solely on historical facts, but rather may be based on the Company's current expectations about future events and results. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis.



However, forward looking statements are subject to risks, uncertainties, assumptions and other factors which could cause actual results to differ materially from future results expressed, projected or implied by such forward looking statements. Such risks include, but are not limited to exploration risk, mineral resource risk, metal price volatility, currency fluctuations, increased production costs and variances in ore grade or recovery rates from those assumed in mining plans, as well as political and operational risks in the countries and states in which we sell our product to, and government regulation and judicial outcomes.

For more detailed discussion of such risks and other factors, see the Company's Prospectus, as well as the Company's other filings. Readers should not place undue reliance on forward looking information. The Company does not undertake any obligation to release publicly any revisions to any "forward looking statement" to reflect events or circumstances after the date of this announcement, or to reflect the occurrence of unanticipated events, except as may be required under applicable securities laws.

Authorised for release by the MetalsGrove Mining Limited Board of Directors,

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JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	 Fixed wing airborne magnetic survey using Cessna 210 aircraft. Magnetometer calibrated on a daily basis This type of survey identifies minerals of varying magnetic intensity which are often associated with a larger mineralized system. Further ground truthing is necessary to confirm the presence of a mineralized system. At this stage, no geophysical features defined by this survey have been sampled.
Drilling techniques	 Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face- sampling bit or other type, whether core is oriented and if so, by what method, etc). 	No drilling results included in release.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 	 No drilling results included in release. No drilling results included in release.
	 Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material. 	No drilling results included in release.
Logging	 Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies. Whether logging is qualitative or quantitative in 	 This release contains no sampling results. This release contains no sampling results.
	nature. Core (or costean, channel, etc) photography.The total length and percentage of the relevant	 This release contains no sampling results. This release contains no sampling results.
Sub-sampling	 intersections logged. If core, whether cut or sawn and whether quarter, half or all core taken. 	This release contains no sampling results.
techniques and sample preparation	 If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. 	This release contains no sampling results.
	 For all sample types, the nature, quality and appropriateness of the sample preparation 	This release contains no sampling results.
	 Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples. 	This release contains no sampling results.
	 Measures taken to ensure that the sampling is representative of the in-situ material collected, 	This release contains no sampling results.
	including for instance results for field	This release contains no sampling results.

Criteria	JORC Code explanation	Commentary
	 duplicate/second-half sampling. Whether sample sizes are appropriate to the grain size of the material being sampled. 	
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. 	 No assays reported Instrument used G-823 caesium vapour magnetometer RSI RS-500 Spectrometer with 2x RSX-4 detectors N/A no assay data to report
	Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.	
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. 	 Data quality assurance and control was completed by independent geophysicists – Southern Geoscience Consultants Pty Ltd
	 Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	
Location of data points	 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. Specification of the grid system used. 	 On-board DGPS positioning of all data locations Primary data was acquired under the GDA94/MGA51 coordinate system Radar Altimeter with +- 1 metre of accuracy Navigational/position accuracy +- 1 metre
	Quality and adequacy of topographic control.	
Data spacing and distribution	 Data spacing for reporting of Exploration Results. Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. Whether sample compositing has been applied. 	 Survey lines were spaced 50-100 metres apart with an average sensor height of 35-45 metres above ground level.
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	 Traverses for Woodie Woodie North were oriented east-west. In general traverses were oriented approximately perpendicular to the general structural trends and broader magnetic units.
Sample security	The measures taken to ensure sample security.	 All data collected under strict security measures by contractor
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	 Contractor conducted normal reviews and confirmation of geophysical data

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status Exploration done	 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 licence to operate in the area. Acknowledgment and appraisal of exploration by 	 Exploration Licence E45/5945 granted 10/03/2022 (5 years term). There are no known existing impediments to the tenements. Readers are referred to the Solicitor's Report in the Prospectus for further information of the legal status associated with the tenure of the Project. All historical work referenced in this report has
by other parties	other parties.	been undertaken by previous project explorers. Whilst it could be expected that work and reporting practises were of an adequate standard, this cannot be confirmed.
Geology	Deposit type, geological setting and style of mineralisation.	The Woodie Woodie North project lies a few km to the west of the Ripon Hills camp of Mn deposits (Consolidated Minerals Australia). The project area straddles the boundary between the lower Hamersley Group Carawine Dolomite and rocks of the Fortescue Group (Mount Bruce Supergroup). The Carawine Dolomite forms part of Hamersley Basin (Carawine Sub-basin). The Carawine Dolomite is overlain by the Pinjian Chert Breccia. The western part of the project area contains rocks of the Maddina Formation (Fortescue Group/Basin) comprising massive, amygdaloidal, or vesicular basalt and basaltic andesite; local komatiitic basalt, dacite, and rhyolite. These rocks are intruded by doleritic rocks assigned to the Fortescue Group (Williams, 2007). Pods of remnant Paterson Formation of the Carboniferous—Permian glacigene Canning Basin are also present in the project area.
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 	 No drilling results included in release. No drilling results included in release.
Data aggregation methods	 case. In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg 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 	 No sampling results are included in release. No sampling results are included in release.

Criteria	JORC Code explanation	Commentary
	 The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry 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 (eg 'down hole length, true width not known'). 	No sampling results are included in 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. 	 Appropriate maps are included in the main body of the Report.
Balanced reporting	 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. 	 Imagery for all graphical AEM results within MetalsGrove tenure has been shown in the included map.
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.	 All data presented herein are historical and MetalsGrove is yet to complete full validation of the nature and quality of the previous work undertaken within its tenements. All material data encountered by MetalsGrove to date has been reported herein.
Further work	 The nature and scale of planned further work (eg 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. 	 Additional sampling and surface mapping is planned for later 2022. Drilling will be planned subject to results. The images included show the location of the current areas of interest.