ASX ANNOUNCEMENT

HIGH-GRADE LITHIUM TANTALUM SOIL SAMPLES RETURNED AT UPPER COONDINA-WA

Highlights:

- ***First pass soil sampling assay results confirm strong lithium and tantalum potential at flagship Upper Coondina in WA***
- ***High-grade soil samples including 670 ppm lithium and 103 ppm tantalum***
- ***Field mapping has previously confirmed a pegmatite corridor with strong lithium anomalism***
- ***Pre-drilling exploration programme has confirmed multiple high quality drilling targets for drill testing in Q4 2022***
- ***Initial priority drill target will be the Chola Prospect – a pegmatite corridor measuring approx. 4.0 km x 2.0 km***
- ***Upper Coondina has the potential to be part of the same system that hosts the major lithium discovery announced by Global Lithium (ASX: GL1) and similar geological setting as Pilbara minerals (ASX: PLS)***
- ***Heritage survey report and POW approval received***

Critical metals exploration and development company **MetalsGrove Mining Limited** (ASX: **MGA**), ("**MetalsGrove**" "**MGA**" or the "**Company**"), is pleased to announce that a recently completed pre-drilling exploration programme has confirmed multiple pegmatite corridor and identified potential drilling targets at the Company's Upper Coondina Lithium Project in Western Australia.

The recently completed programme comprised soil sampling, airborne survey and surface field mapping which revealed a corridor containing multiple pegmatites which are coincident with the source area and with surface geochemistry.

Encouraging soil sampling assays including Li_2O 670 ppm and Ta 103 ppm have been returned. Multiple outcropping pegmatite dykes occurring in swarms, with pegmatite dykes strike approximately 8.0 km x 4.0 km.

Initial observations suggest Upper Coondina has two generations of pegmatite - G1 and G2, which host the lithium mineralisation found within the Pilbara lithium field.

MGA also believes Upper Coondina may be part of the same system that hosts the major lithium discovery announced by Global Lithium (ASX: GL1) and similar geological setting as Pilbara minerals (ASX: PLS) north of MGA's ground.

Commenting on the encouraging soil sample assays from Upper Coondina, MetalsGrove's Managing Director, Sean Sivasamy said:

"We are delighted with the assay results from our pre-drilling soil sampling which has confirmed the high-grade lithium potential of Upper Coondina. Our technical team has also used this data to refine our priority drill targets starting with the Chola Prospect which is shaping up to be an exciting structure.

All necessary approvals have now been finalised and we are aiming to have the drill rig spinning in late November to test this suite of initial targets as we finish the calendar year with momentum."

MetalsGrove MINING LIMITED

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Geochemistry confirms drill targets at Upper Coondina

Over 2,500 soil samples were taken from the southern part of the Upper Coondina Chola Prospect. The geochemical responses and surface field mapping identified strong LCT-pegmatite anomalies, which is in an 8km by 4km multiple pegmatite corridor.

First pass soil sampling assay results confirm lithium mineralisation and defining the drilling target within the Chola Prospect pegmatite corridor measuring approximately 4.0 km x 2.0 km.

Chola Prospect - expanding horizon of lithium-bearing pegmatites

Figure 1 shows the location of the Chola Prospect pegmatite outcrop and pegmatite structural corridor at the Upper Coondina Lithium Prospect that were confirmed by soil sampling assays hosting lithium mineralisation and expanding up north and west.

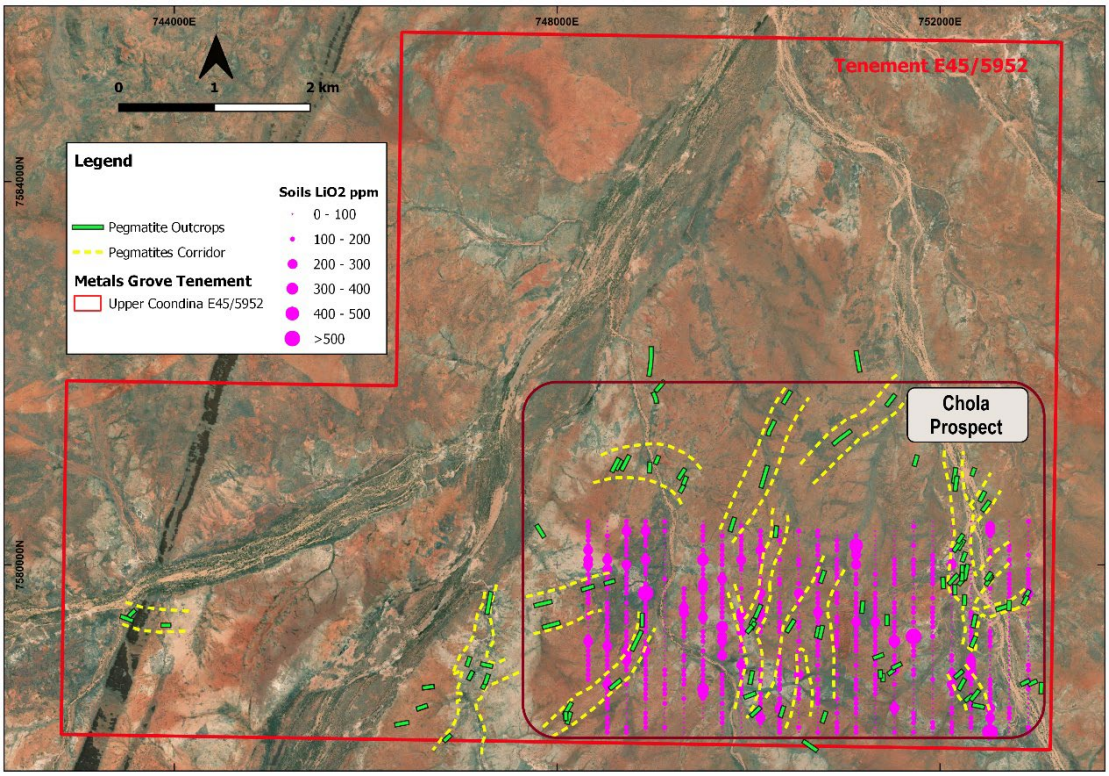

Figure 1 – Showing pegmatites with lithium assay results against pegmatite outcrop and pegmatite structural corridor-Chola Prospect.

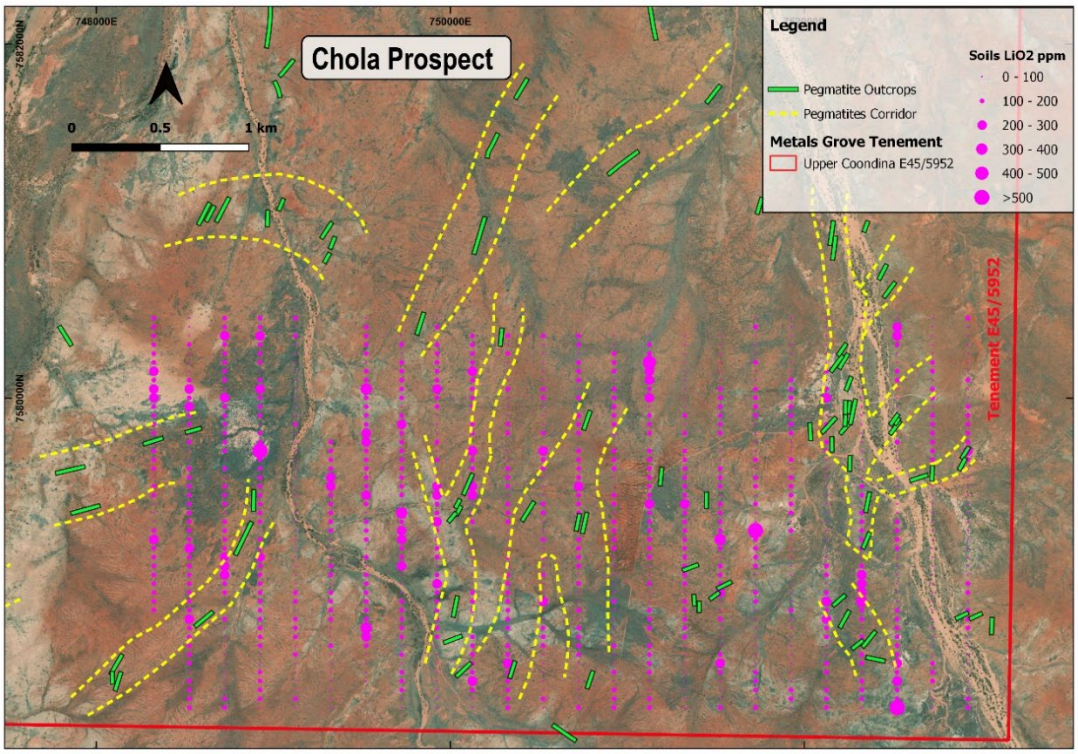

Figure 2 – Showing soil sampling lithium assay results against pegmatite outcrop and pegmatite corridor – Chola Prospect.

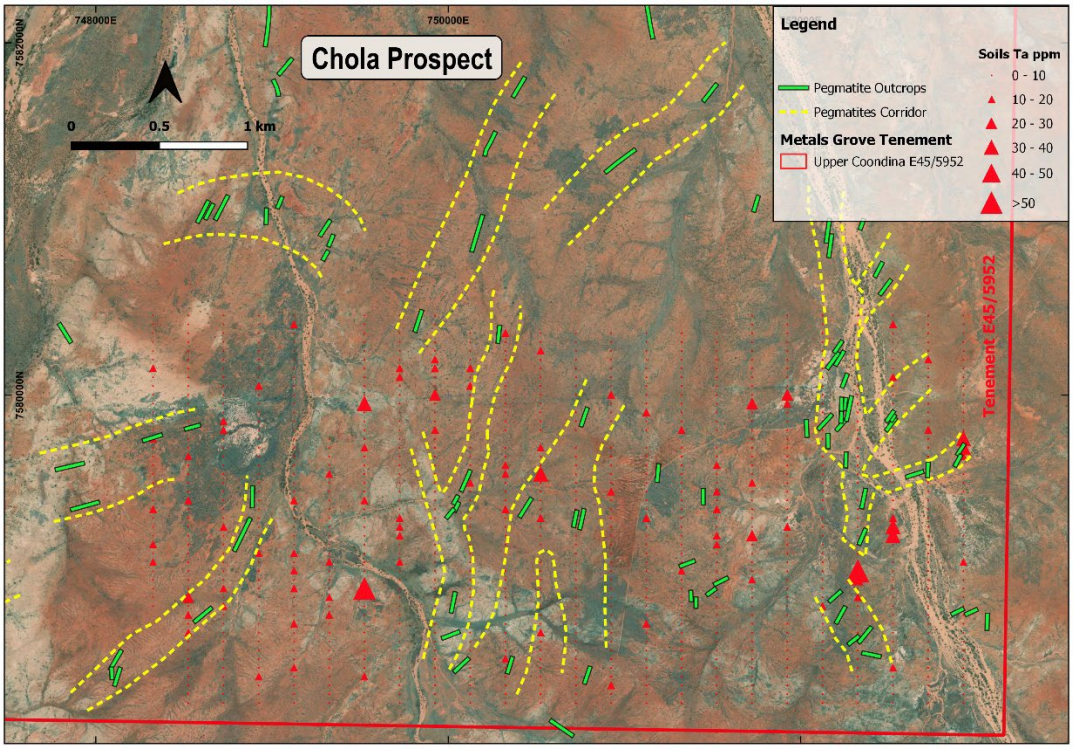

Figure 3 – Showing soil sampling assay with tantalum assay results against pegmatite outcrop and pegmatite corridor – Chola Prospect.

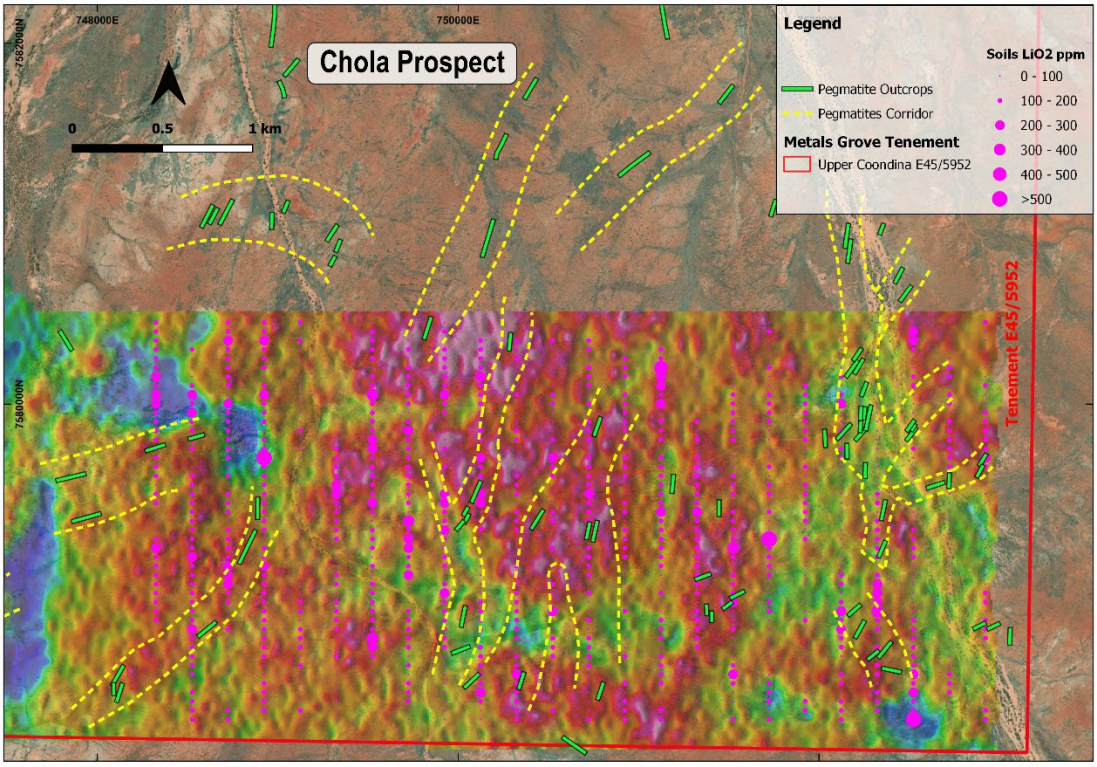

Figure 4 – Showing soil sampling lithium assay results against radiometric-potassium analysis, pegmatite outcrop and pegmatite corridor – Chola Prospect.

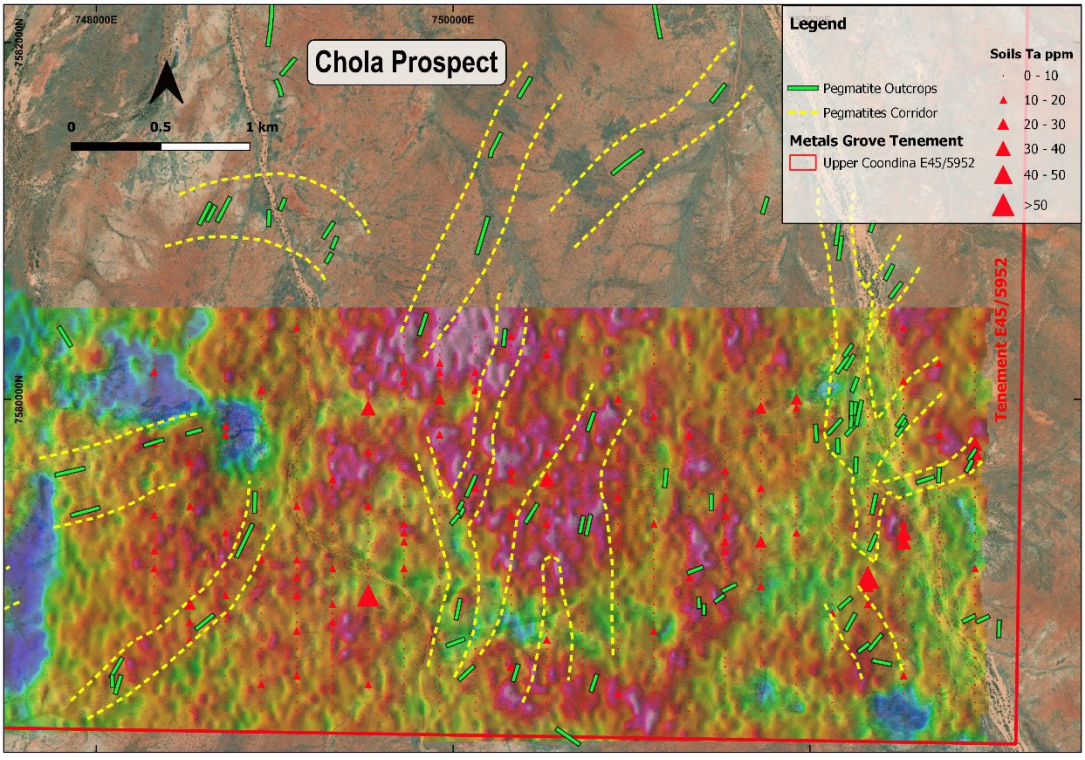

Figure 5 – Showing soil sampling tantalum assay results against radiometric-potassium analysis, pegmatite outcrop and pegmatite corridor – Chola Prospect.

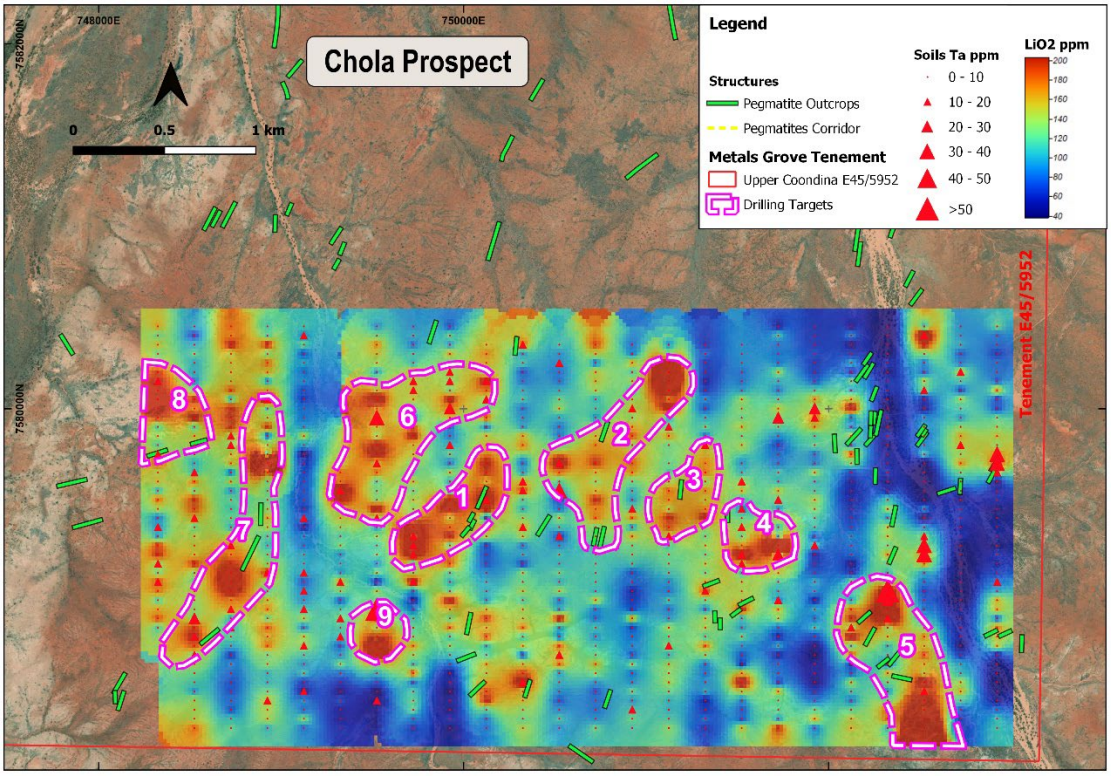

Figure 6 – Showing lithium assay heat map and tantalum assays results against pegmatite outcrop and pegmatite corridor – Chola Prospect.

Next steps

Pending soil samples assay results are expected to be received over the coming weeks. These results will allow the Company to define more drilling targets to test the outcropping pegmatites at depth, to confirm their orientation and the extent of any high-grade lithium mineralisation continuing below surface.

Earthworks for the upcoming maiden lithium drill programme are scheduled to commence in mid-November 2022. The start of drilling is scheduled for late November.

Upper Coondina Project Background

The Upper Coondina Project is located approximately halfway between the major mining regional service centres of Port Hedland and Newman - approximately 200 km northwest and 180 km south-southeast of the project, respectively.

The Project comprises a single granted Exploration Licence. The tenement covers an area of approximately 6,363 ha and the maximum distance across the project is about 11 km east–west and 8 km north–south. Nearby lithium mines include Wodgina (MinRes ASX: MIN), Pilbara Minerals (ASX: PLS) and recent lithium developer Global Lithium (ASX: GL1).

Historical Exploration Summary

The Greater Shaw Tin Field has attracted exploration interest since the discovery of tin in 1890. However, most of the exploration and subsequent mining of tin and tantalum has been on the small scale. The Shaw Tin Field, has historically produced more than 6,500 t of tin concentrate.

In 1968, Marble Bar Nickel carried out a rock chip sampling programme covering tenement E45/3699 of the current Hillside CRG (A1714). A 1972 stream sediment sampling programme by Anglo American Services Limited targeting Ni-Cu

mineralisation identified a copper anomaly in ultramafic and pillow basalts and another in altered gabbro. Both were subsequently found to be insignificant.

In early 1968, the field was largely abandoned after the shallow deposits were soon exhausted. Towards the end of 1968, a local resident discovered further cassiterite mineralisation in cemented alluvium within a largely concealed tertiary drainage channel. In 1983, CSR Limited explored for economic secondary concentrations of tin and tantalum in the area. Their exploration program included follow-up on radiometric anomalies, stream sediment sampling and geological mapping. No discrete localities of anomalous tin could be identified. CSR Limited identified simple pegmatite veins as the sources of the tin.

No dedicated Li-focused exploration has been carried out within the project area. However, given historical surface geochemical sampling has returned anomalous values up to 253 ppm LiO_2, MetalsGrove considers that this untested magnetic anomaly warrants follow-up exploration to determine its source.

The exploration results that are referred to above were included in MetalsGrove's IPO prospectus dated 13 May 2022 (**Prospectus**). MetalsGrove is not aware of any new information in respect of these results, and confirms that full details with respect to these results are included in the Prospectus.

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 has been developed by Sean Sivasamy. All assay results have been complied by Mr Sivasamy who is a member of Australasian 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'.

Mr Sivasamy consents 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,

SHAREHOLDER ENQUIRIES	MEDIA ENQUIRIES	GENERAL ENQUIRIES
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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 (e.g. 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.*	• Soils samples collected from below the surface organic layer at a depth of approximately 20cm. Soil samples are sieved on site and the ~5mm fraction is retained for geochemical analysis, soil sample weights are approximately 300 to 500 grams. • All sieved material collected is collected in either calico bags or kraft packets (up to 300 grams). • The soil sampling techniques utilised for Chola are considered standard industry practice.
Drilling Techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of The samples were rock chip samples, no drill samples were collected.*	• No drilling results are included in this release.
Drill Sample Recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximize sample recovery and ensure representative nature of the samples.* • *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 are included in this release.

Criteria	JORC Code Explanation	Commentary
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 nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	• Soil sample sites are described noting landform and nature of soil media. • Soil sample descriptions are considered qualitative in nature.
Sub-sampling Techniques and Sample Preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.* • *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* • *Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples.* • *Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.* • *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• Sample preparation follows industry best practice standards at accredited laboratories. • Sample preparation comprises oven drying, jaw crushing and pulverising to 80% passing 75µm. • Chola soil samples collected on a 200mx50m grid pattern. • Sample sizes (0.2kg – 1.5kg) are considered appropriate for the technique.
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,*	• Chola soil samples submitted to NAGROM laboratories for 21 elements by Peroxide Fusion in Zirconium Crucibles (PF01). • The analytical techniques and quality control protocols used are considered appropriate for the data to be used.

Criteria	JORC Code Explanation	Commentary
	calibrations factors applied and their derivation, etc. • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. 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.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• No drilling results are included in this release. • Primary soil sampling data was collected electronically.
Location of Data Points	• *Accuracy and quality of surveys used to locate drillholes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• A handheld GPS was used to locate the data positions, with an expected +/-5m vertical and horizontal accuracy. The grid system used for all sample locations is the UTM Geocentric Datum of Australia 1994 (MGA94 Zone 50). GPS measurements of sample positions are sufficiently accurate for first pass geochemical sampling.
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.*	• Soil sampling line spacing between ~200mE to ~50mN grid within Chola prospect area. • No compositing undertaken on soil samples.
Orientation of data in relation to geologic al	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is*	• The orientation of the soil sampling lines has not been considered to have introduced sampling bias.

Criteria	JORC Code Explanation	Commentary
structure	*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.*	
Sample security	• *The measures taken to ensure sample security.*	• Samples are collected in polyweave bags and delivered directly from site to the assay laboratory in Perth.
Audits or Reviews	• *The results of any audits or reviews of sampling techniques and data.*	• There have not been any external audits of these first pass soil sample results.

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	• *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.*	• The soil samples were collected from tenement E45/5952. • There are no third-party arrangements or royalties etc. to impede exploration on the tenure. • There are no reserves or national parks to impede exploration on the tenure. • Ownership – 100% MetalsGrove Mining Ltd.
Exploration Done by Other Parties.	• *Acknowledgment and appraisal of exploration by other parties.*	• All historical work referenced in this report has been undertaken by previous project explorers. Whilst it could be expected that work and reporting practices were of an adequate standard, this cannot be confirmed.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The tenement lies within what is generally referred to as the Shaw Tin Field (Blockley, 1980), owing to the numerous alluvial tin and

Criteria	JORC Code Explanation	Commentary
		tantalum deposits in the area. The tin (mainly cassiterite) and tantalum (mainly tantalite) mineralisation were derived from albite pegmatites intruded along the margins of the post-tectonic Cooglegong and Spear Hill Monzogranites, which belong to the Split Rock Supersuite. Practically all of the tin concentrate produced from 1965–1968 came from shallow alluvial deposits following small, first or second order tributaries of the Shaw River. Tin-bearing gravels are restricted to the upper parts of the streams (Blockley, 1980).
Drillhole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drillholes:* • *easting and northing of the drillhole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drillhole collar dip and azimuth of the hole* • *down hole length and interception depth hole length.*	• No drilling results are included 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*	• No data aggregation methods were applied to the soil sampling data.

Criteria	JORC Code Explanation	Commentary
	reporting of metal equivalent values should be clearly stated.	
Relationship Between Mineralisation Widths and Intercept Lengths	• *If the geometry of the mineralisation with respect to the drillhole angle is known, its nature should be reported.*	• Not applicable.
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 drillhole collar locations and appropriate sectional views.*	• See maps in the 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 avoiding misleading reporting of Exploration Results.*	• The reporting of these soil sample results is considered to be representative.
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 meaningful data and relevant information have been included in the body of the report.
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.*	• Additional sampling and surface mapping is planned for the coming months. • Drilling will be planned subject to results. • The images included show the location of the current areas of interest.