



#### Date

20 July 2022

#### ASX Code

MGA

#### Company Directors

Mr Sean Sivasamy

Managing Director and CEO

Mr Richard Beazley

Non-Executive Chairperson

Mr Haidong Chi

Non-Executive Director

#### Company Secretary

Mr Jack Rosagro

#### Contact Details

6/123A Colin Street

West Perth WA-6005

T: + 61 8 6388 2725

E: [info@metalsgrove.com.au](mailto:info@metalsgrove.com.au)

W: [metalsgrove.com.au](http://metalsgrove.com.au)

## TECHNICAL REVIEW HIGHLIGHTS LARGE CONDUCTOR AT BRUCE PROSPECT, NORTHERN TERRITORY

### Highlights:

- ***MGA has identified a broad conductor along strike from the Plenty River mine which is adjacent to magnetic features interpreted to be components of the pegmatite intrusion***
- ***Bruce Prospect is considered highly prospective for Rare Earth, Copper-Gold and LCT Pegmatite mineralisation***
- ***5,973-line kilometres of helicopter borne magnetic and radiometric survey commencing at Arunta Project tenements (EL31225, EL32419 and EL32420) to allow detailed lithological and structural mapping***
- ***Aggressive drilling is planned at the Bruce Prospect following completion of the helicopter borne magnetic and radiometric survey***

Critical metals exploration and development company **MetalsGrove Mining Limited** (ASX: **MGA**), ("**MGA**" or the "**Company**"), is pleased to announce that a recently completed technical review of historical airborne electromagnetics survey data has highlighted a large conductor zone within the Bruce Prospect in the Northern Territory.

The Bruce Prospect is considered prospective for Rare Earth, Copper-Gold and LCT pegmatite mineralisation and is located within the broader Arunta Project ~300 km by road from Alice Springs and 13 km north of the Plenty Highway (see Figure 2).

During 2017-18 Northern Territory Geological Survey (NTGS) completed airborne electromagnetics survey at Bruce and the survey data was collected and re-processed by MetalsGrove.

Following a detailed review, MetalsGrove has identified a broad conductor along strike from the Plenty River mine which is adjacent to magnetic features interpreted to be components of the pegmatite intrusion. The broad conductor has not been tested to date.

3,954-line kilometres of airborne magnetic and radiometric survey at 50m spacing on north-south traverse line direction is scheduled to commence shortly for initial follow-up investigation.

An aggressive drilling programme is planned to test the bedrock conductor after completion of airborne magnetic and radiometric survey.

Additional exploration to be completed with the Arunta Project area this quarter includes 1,147-line kilometres of airborne magnetic and radiometric survey at the Box Hole Prospect with 50m spacing on north-south traverse line direction.

### MetalsGrove's Managing Director, Sean Sivasamy commented:

"We are delighted with the results from our review of historic data, as it has confirmed the strong potential of the Bruce Prospect and defined a significant new area of interest for our upcoming exploration programmes.

The broader Arunta Project is a highly mineralised region which has already demonstrated the potential to host Rare Earth, Copper-Gold and LCT mineralisation. This technical review provides our team with a great foundation to launch our 2022 exploration campaign and as a result we are building a very targeted programme to be carried out across this area over the coming months.

I look forward to providing regular updates on our exploration advances over the coming weeks at this exciting time for MetalsGrove".

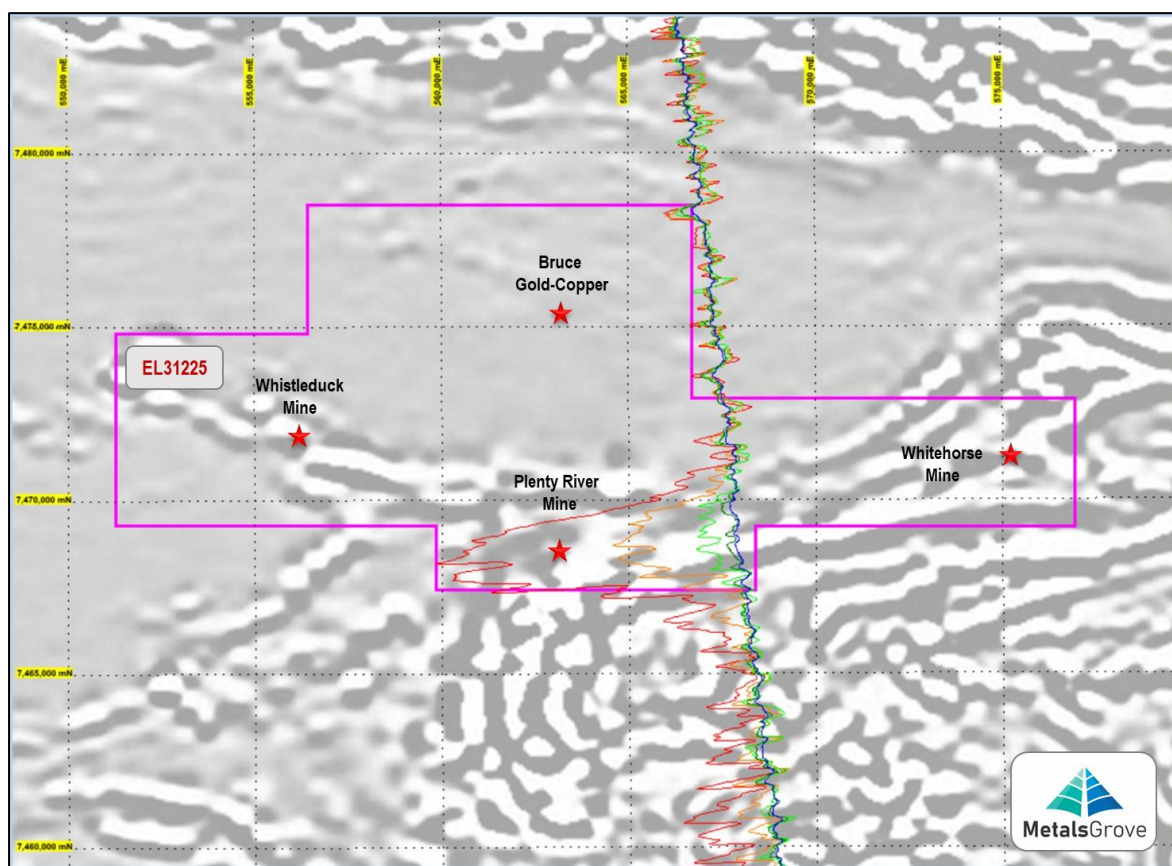
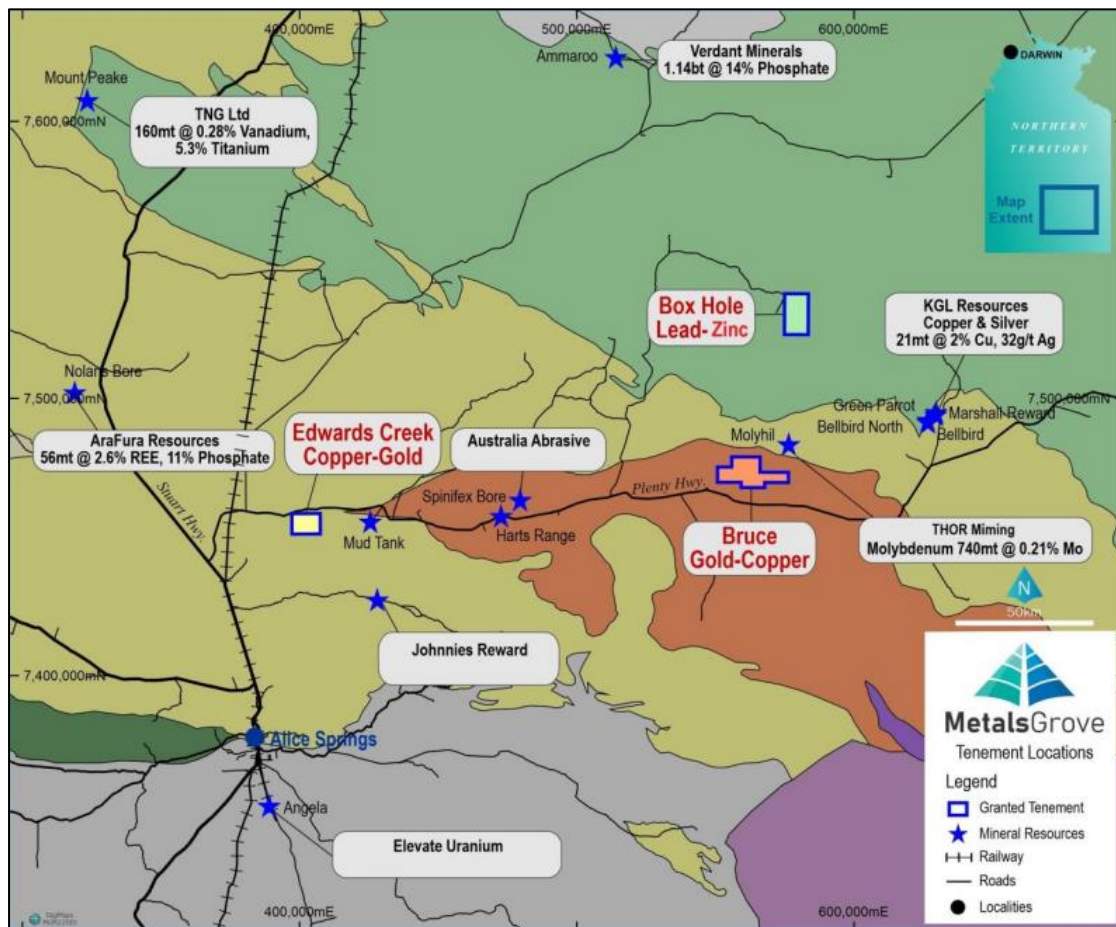


Figure 1: AEM stacked profiles over 2VD TMI Aeromagnetics

### Bruce Prospect Summary

The Bruce Prospect is located within the Central Desert Region of the Northern Territory and covers an area of approximately 17,722 ha and the maximum distance across the project is about 25 km east-west and 10 km north-south.

The nearest historical mine is the inactive Harts Range garnet mine (approximately 80 km to the west-southwest) while the Molyhil tungsten-molybdenum project (Thor Mining PLC) is approximately 10 km to the northeast.



*Figure 2: Arunta Project Location Plan*

Third party exploration results referred to in Figure 2 were first announced in the following ASX releases:

1. TNG Limited's (ASX: TNG) ASX announcement "Mount Peake Resource Drilling Update" dated 8 February 2013.
2. Verdant Minerals Limited's (ASX: VRM) ASX announcement "Ammaroo Resource Update March 2017" dated 15 March 2017.
3. Arafura Resources Limited's (ASX: ARU) ASX announcement "Nolans Project Update" dated 11 May 2021.
4. KGL Resources Limited's (ASX: KGL) ASX announcement "Resource Upgrade at Jervois Copper Project" dated 15 September 2020.
5. Thor Mining plc's (ASX: THR) ASX announcement: "Mineral Resource Estimates Bonya Tungsten & Copper" dated 29 January 2020.

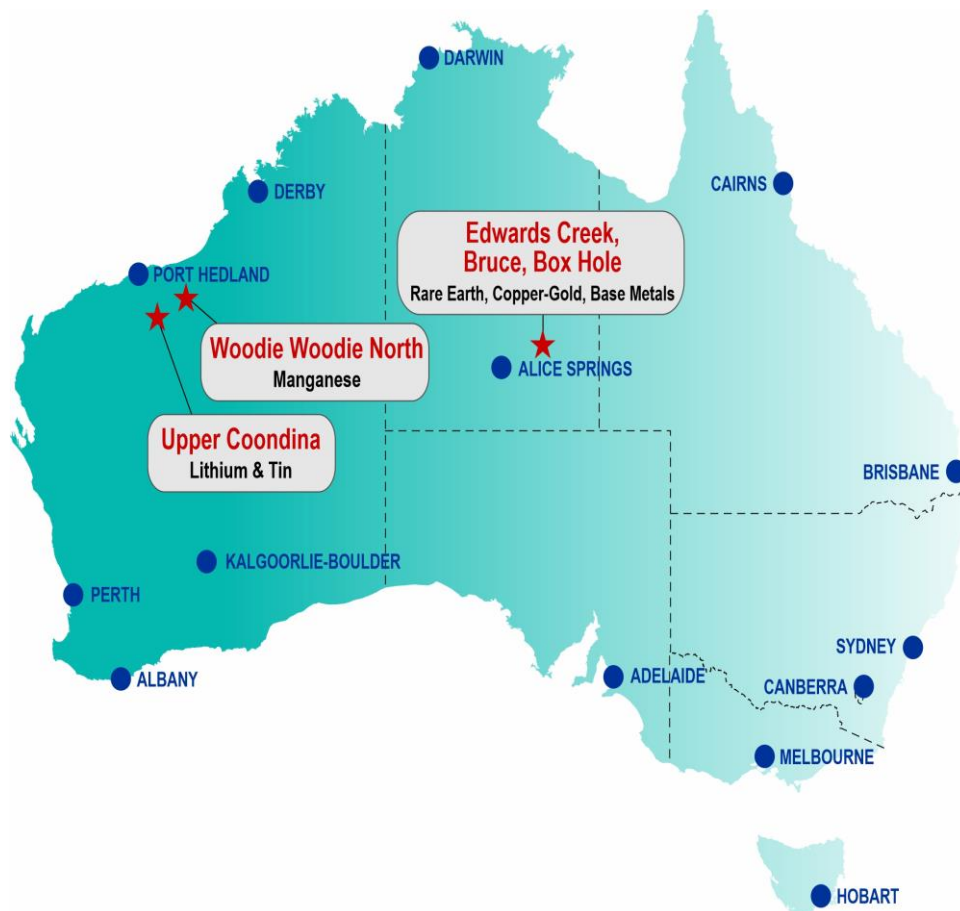
MetalsGrove is not aware of any new information in respect of the results referenced in the above ASX announcements ("**Previous Announcements**") and that full details with respect to the third-party results referred to in Figure 2 are included.

### 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.



*Figure 3: MetalsGrove Project Location Summary*

### Competent Person Statement – Exploration Strategy

The information in this announcement that relates to exploration strategy and results is 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 Fellow of The Australian Institute of Mining and Metallurgy.

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,

### SHAREHOLDER ENQUIRIES

Sean Sivasamy  
Managing Director & CEO  
MetalsGrove Mining Ltd  
[seans@metalsgrove.com.au](mailto:seans@metalsgrove.com.au)

### MEDIA ENQUIRIES

Sam Burns  
SIX® Investor Relations  
+61 400 164 067  
[sam.burns@sdir.com.au](mailto:sam.burns@sdir.com.au)

### GENERAL ENQUIRIES

MetalsGrove Mining Ltd  
[www.metalsgrove.com.au](http://www.metalsgrove.com.au)  
[info@metalsgrove.com.au](mailto:info@metalsgrove.com.au)



# 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	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>This release contains no sampling results.</li> <li>This release contains no sampling results.</li> <li>This release contains no sampling results.</li> <li>This release contains no sampling results.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>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).</li> </ul>	<ul style="list-style-type: none"> <li>No drilling results included in release.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling results included in release.</li> <li>No drilling results included in release.</li> <li>No drilling results included in release.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul style="list-style-type: none"> <li>This release contains no sampling results.</li> <li>This release contains no sampling results.</li> <li>This release contains no sampling results.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>Measures taken to ensure that the sampling is</li> </ul>	<ul style="list-style-type: none"> <li>This release contains no sampling results.</li> <li>This release contains no sampling results.</li> <li>This release contains no sampling results.</li> <li>This release contains no sampling results.</li> <li>This release contains no sampling results.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.</i></p> <ul style="list-style-type: none"> <li><i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>This release contains no sampling results.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li><i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li><i>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.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>This release contains no sampling results.</li> <li>Data in this release was captured with TEMPEST fixed wing AEM system configuration - Government survey AusAEM (NT-QLD) 2017/2018 – Job 700718 – completed by CGG20km line spacing NS direction - ~120m mean terrain clearance.</li> <li>This release contains no sampling results.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li><i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li><i>The use of twinned holes.</i></li> <li><i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li><i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>This release contains no sampling results.</li> <li>This release contains no sampling results.</li> <li>Data captured into automated digital systems prior to processing.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li><i>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.</i></li> <li><i>Specification of the grid system used.</i></li> <li><i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>Data is spatially located to sub-metre accuracy with a differential GPS (DGPS) during capture.</li> <li>The grid projection used for Coates is MGA_GDA94, Zone 53. All maps included in this report are referenced to this grid.</li> <li>Topographic control captured by DGPS system during capture.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li><i>Data spacing for reporting of Exploration Results.</i></li> <li><i>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.</i></li> <li><i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>The regional AEM survey was flown along 20 km spaced lines, with lines oriented roughly perpendicular to the stratigraphy.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li><i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>This release contains no sampling results.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li><i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>This release contains no sampling results.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li><i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>This release contains no sampling results.</li> </ul>

## Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
<i>Mineral tenement and land tenure status</i>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Exploration Licence EL31225 granted 23/12/2016 (6 years term).</li> <li>There are no known existing impediments to the tenements.</li> <li>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.</li> </ul>
<i>Exploration done by other parties</i>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul style="list-style-type: none"> <li>All historical work referenced in this report has 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.</li> </ul>
<i>Geology</i>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul style="list-style-type: none"> <li>The Bruce project tenement covers Lower Proterozoic rocks along, and flanking, the Delny-Mt. Sainthill Fault Zone, a feature developed within a wide west-northwest trending tectonic zone. Most of the project tenement is overlaid by Quaternary alluvium and soils. The project tenement is host to the historical Plenty River Mica Mining Area. Near the centre of the tenement lies the historical Bruce Au-Cu occurrence. The prospect is associated with quartz veins, where east-trending quartz veins contain Cu and also locally contain Au (up to 53 ppm Au; Wygralak and Mernagh 2005). The pegmatite outcrop hosting number of silicious and micaceous occurrences on the potential for LCT and REE bearing.</li> </ul>
<i>Drill hole Information</i>	<ul style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>No drilling results included in release.</li> </ul>
<i>Data aggregation methods</i>	<ul style="list-style-type: none"> <li>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.</li> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>No sampling results are included in release.</li> <li>No sampling results are included in release.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>examples of such aggregations should be shown in detail.</i></p> <ul style="list-style-type: none"> <li><i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	
<i>Relationship between mineralisation widths and intercept lengths</i>	<ul style="list-style-type: none"> <li><i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li><i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li><i>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').</i></li> </ul>	<ul style="list-style-type: none"> <li>No sampling results are included in release.</li> </ul>
<i>Diagrams</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Appropriate maps are included in the main body of the Report.</li> </ul>
<i>Balanced reporting</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>Imagery for all graphical AEM results within MetalsGrove tenure has been shown in the included map.</li> </ul>
<i>Other substantive exploration data</i>	<ul style="list-style-type: none"> <li><i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>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.</li> </ul>
<i>Further work</i>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>Additional sampling and air core drilling is planned for later 2022.</li> <li>An aeromagnetic and radiometric survey is planned.</li> <li>Drilling will be planned subject to results.</li> <li>The images included show the location of the current areas of interest.</li> </ul>