MetalsGrove
MINING LIMITED

Date
03 June 2024

ASX Code
MGA

Shares on Issue
105,420,000

Contact Details
Suite 9, Level 2
389 Oxford Street
Mount Hawthorn WA 6016
T: + 61 8 9380 6789
E: info@metalsgrove.com.au
W: metalsgrove.com.au

Zimbabwe Lithium Projects – Mapping and Sampling Results Received from Initial Exploration Program

Highlights

- ***Perth-based consulting firm, GeoCOM, was engaged in February 2024 by the previous management team of MetalsGrove to undertake initial geological mapping and surface sampling on two newly acquired lithium projects in Zimbabwe, Arcturas and Beatrice.***
- ***Geological mapping consisted of defining several pegmatites although with less detailed geological observations.***
- ***A total of 104 rock samples were collected, prepared, and submitted to ALS South Africa for analysis - nine samples from the Beatrice region and 95 from the Arcturas region. More than one-third of the samples were collected from areas outside MetalsGrove's tenements.***
- ***Pathfinder elements commonly associated with lithium mineralisation, such as tantalum, potassium and rubidium, were not included in the assay suite.***
- ***The 95 samples collected from the Arcturas region recorded lithium values at trace levels or below detection limits (BDL).***
- ***The nine samples collected from the Beatrice region area showed encouraging lithium grades, with values up to 1.44% Li_2O; however, only one of these samples was collected from within MetalsGrove's tenements.***
- ***The company is planning further exploration work on these projects, including a site visit in June.***

MANAGEMENT COMMENTARY

Commenting on the assay result, Managing Director Lijun Yang, said: *"The final report and assay results from the initial surface mapping and sampling program fell short of the company's expectations. Assay results from identified pegmatites within the Arcturas Project are barren in lithium. Samples collected from the Beatrice Project showed encouraging lithium grades with lepidolite observed, but only one of these samples, grading 0.88% Li_2O, was collected from within MetalsGrove's granted tenements.*

"However, in the absence of detailed geological observations, and with no pathfinder elements such as tantalum, potassium and rubidium included in the assay suite, the company, whilst disappointed with the initial results, considers that further investigation is warranted.

"The company is planning further work on these projects, including a site visit in June."

Global multi-metal resource exploration company **MetalsGrove Mining Limited** (**ASX: MGA**) ("**MetalsGrove**" "**MGA**" or the "**Company**") advises that surface mapping and sampling results from the Company's initial exploration program undertaken in February at the Arcturas Lithium Project **(ALP)** and the Beatrice Lithium Project **(BLP)** in Zimbabwe have been received.

MetalsGrove acquired the two projects on 11 December 2023 under the company's previous management team.

Arcturas is located approximately 35km northeast of Harare and Beatrice is located approximately 55km south of Harare (Figure 1). The projects consist of six new lithium claims encompassing a total area of approximately 510ha and one claim in application.

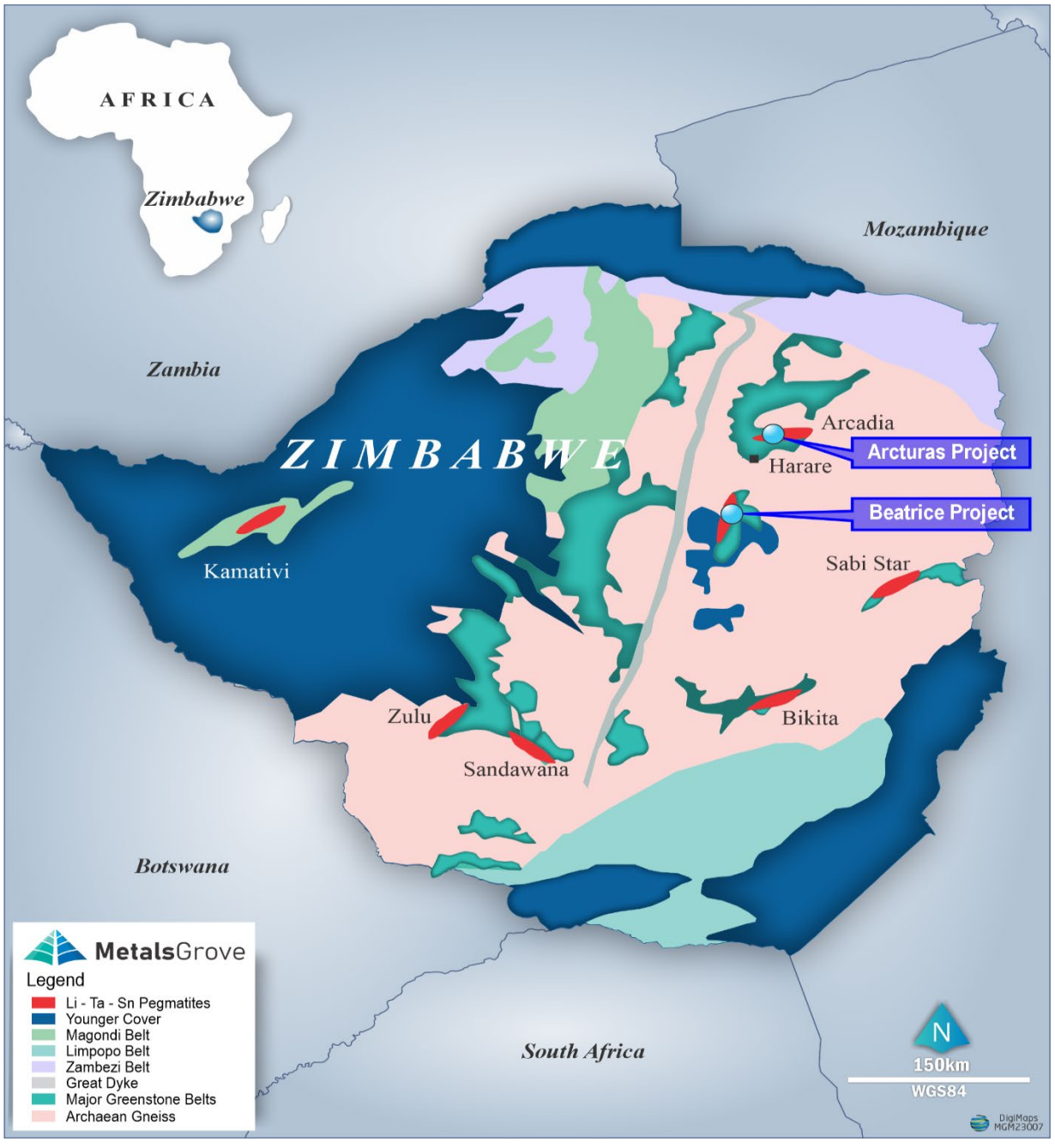

Figure 1: Map of Zimbabwe showing location of Arcturas and Beatrice Lithium Projects.

Perth-based consulting firm, GeoCOM, was engaged by the previous management team of MetalsGrove in February 2024 to undertake an initial program of geological mapping and surface sampling on Arcturas and Beatrice.

Geological mapping consisted of defining several pegmatites although with less detailed geological observations. The initial site visit was primarily focussed on negotiating and acquiring the tenements.

A total of 104 rock samples were collected, prepared, and submitted to ALS South Africa for analysis, including nine samples from the Beatrice region and 95 from the Arcturas region. More than one-third of the samples collected were from areas outside MetalsGrove's tenements.

Pathfinder elements commonly associated with lithium mineralisation, such as tantalum, potassium, and rubidium, were not included in the assay suite.

The coordinates and assay results for each of the 104 samples are detailed in Table 1.

Arcturas Lithium Project

Arcturas is located approximately 15km west of the Arcadia Lithium Mine (Figure 2).

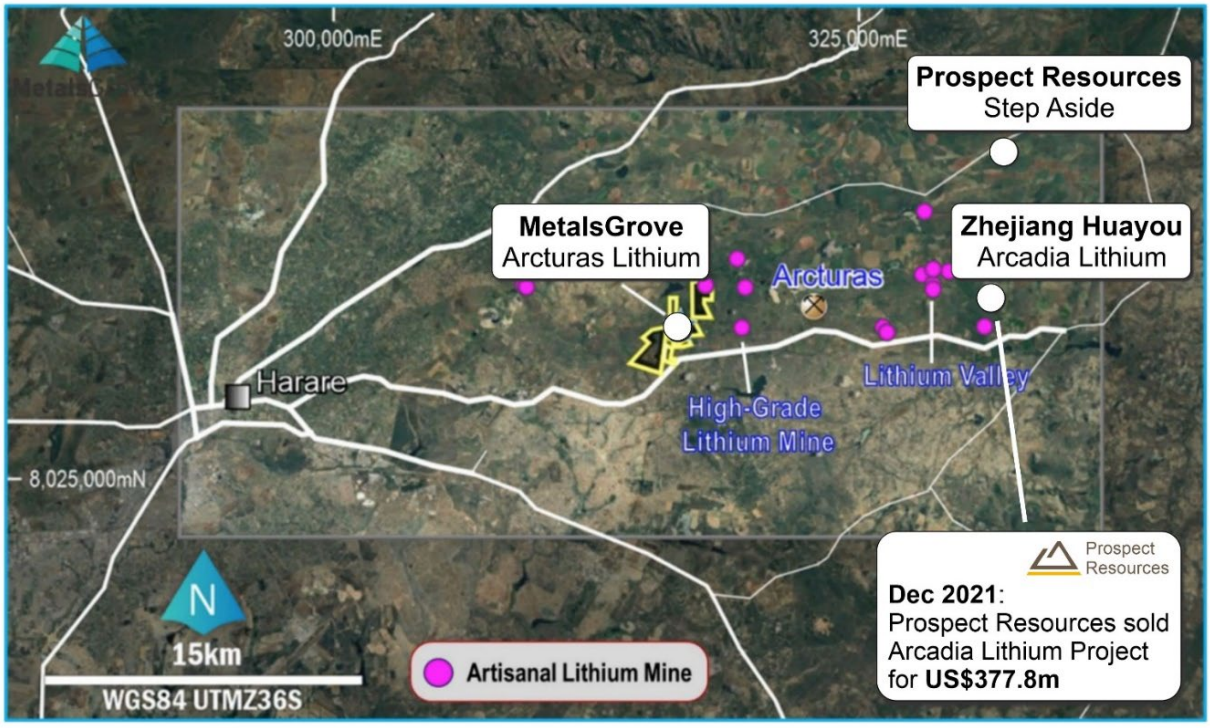

Figure 2: Map illustrating location of Arcturas Lithium Prospect.

Considered to be one of the world's largest hard-rock lithium resources, Arcadia, which is owned and operated by Zhejiang Huayou Cobalt, was acquired in December 2021 from Prospect Resources Limited (ASX: PSC) at a cost of approximately US$378m. Arcadia currently produces approximately 450,000 t/y of lithium concentrates. Prospect Resources retained the Step Aside Lithium Project, located approximately eight kilometres to the north of Arcadia, where recent drilling success (announced January 2024) includes 67m @ 1.17% Li_2O.

The region is considered highly prospective, hosting many pegmatite zones variously mineralised in lithium (spodumene and lepidolite)-caesium-tantalum (LCT) and beryllium.

A total of 95 samples were collected from the Arcturas Project area. GeoCOM reports that no lithium-bearing minerals were observed.

All samples recorded lithium values at trace levels or below detection limits (Figure 3).

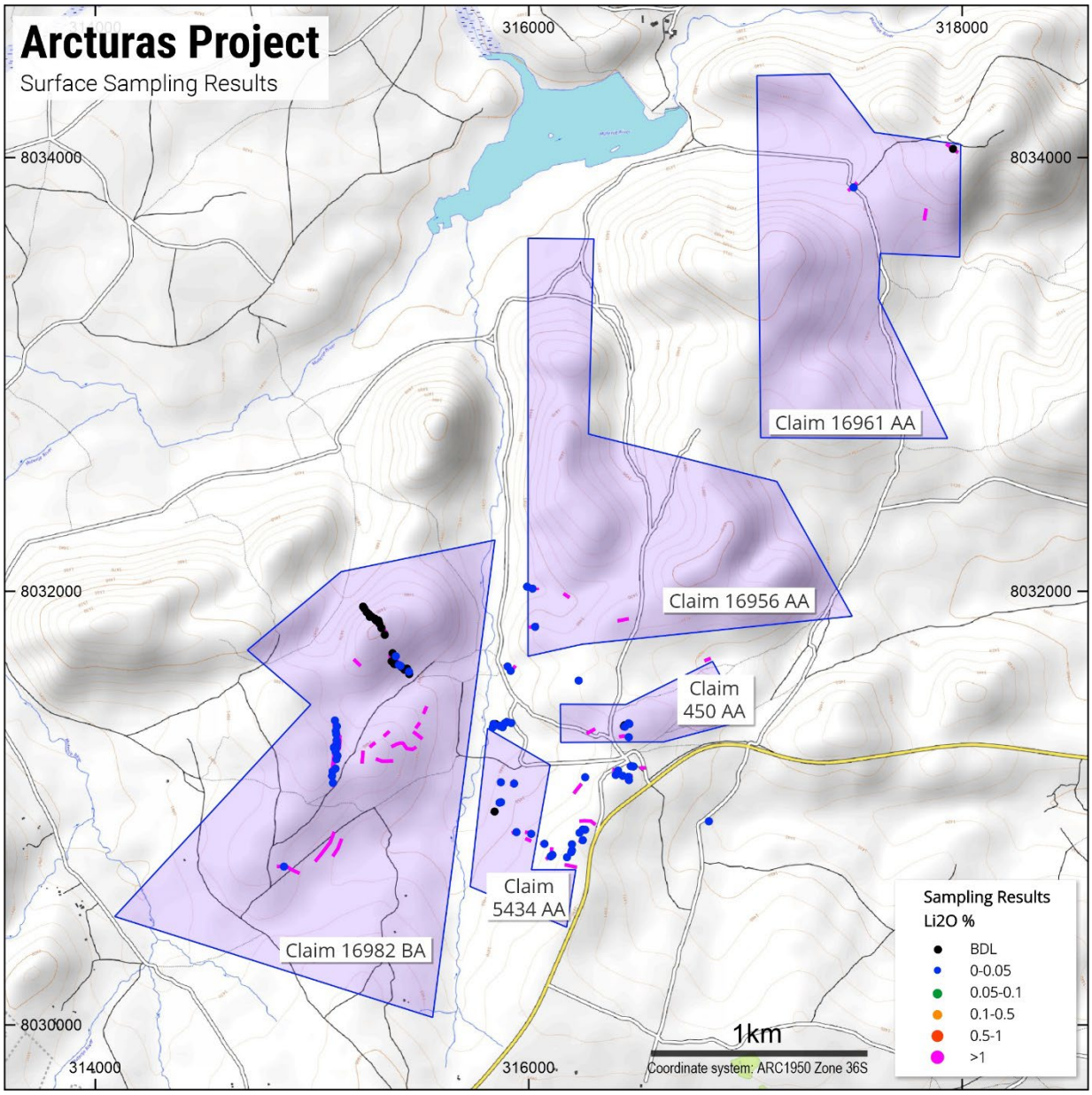

Figure 3: Map of Arcturas illustrating surface sampling locations and results.

Beatrice Lithium Project

Beatrice is located a short distance from the Joyce Gold Mine (Figure 4).

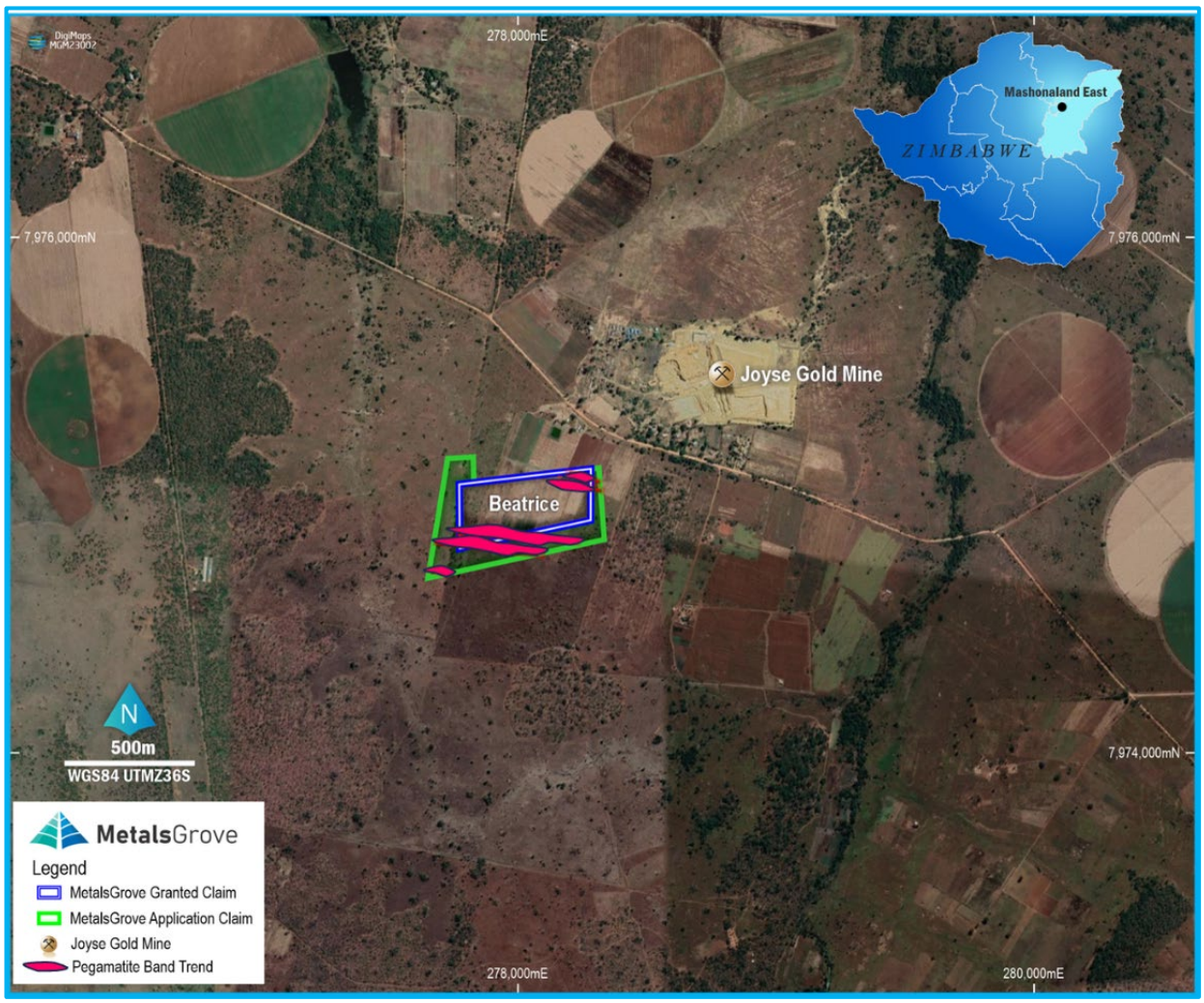

Figure 4: Map illustrating location of Beatrice, including Pegmatite band trends.

Beatrice is a well-known pegmatite zone that is mineralised in lithium (lepidolite)-caesium-tantalum (LCT).

Nine samples were collected for assay by GeoCOM.

These variously recorded encouraging lithium grades, with values of up to 1.44% Li_2O. Unfortunately, only one of these samples, at the grade of 0.88% Li_2O, was collected from within MetalsGrove's granted tenements (Figure 5).

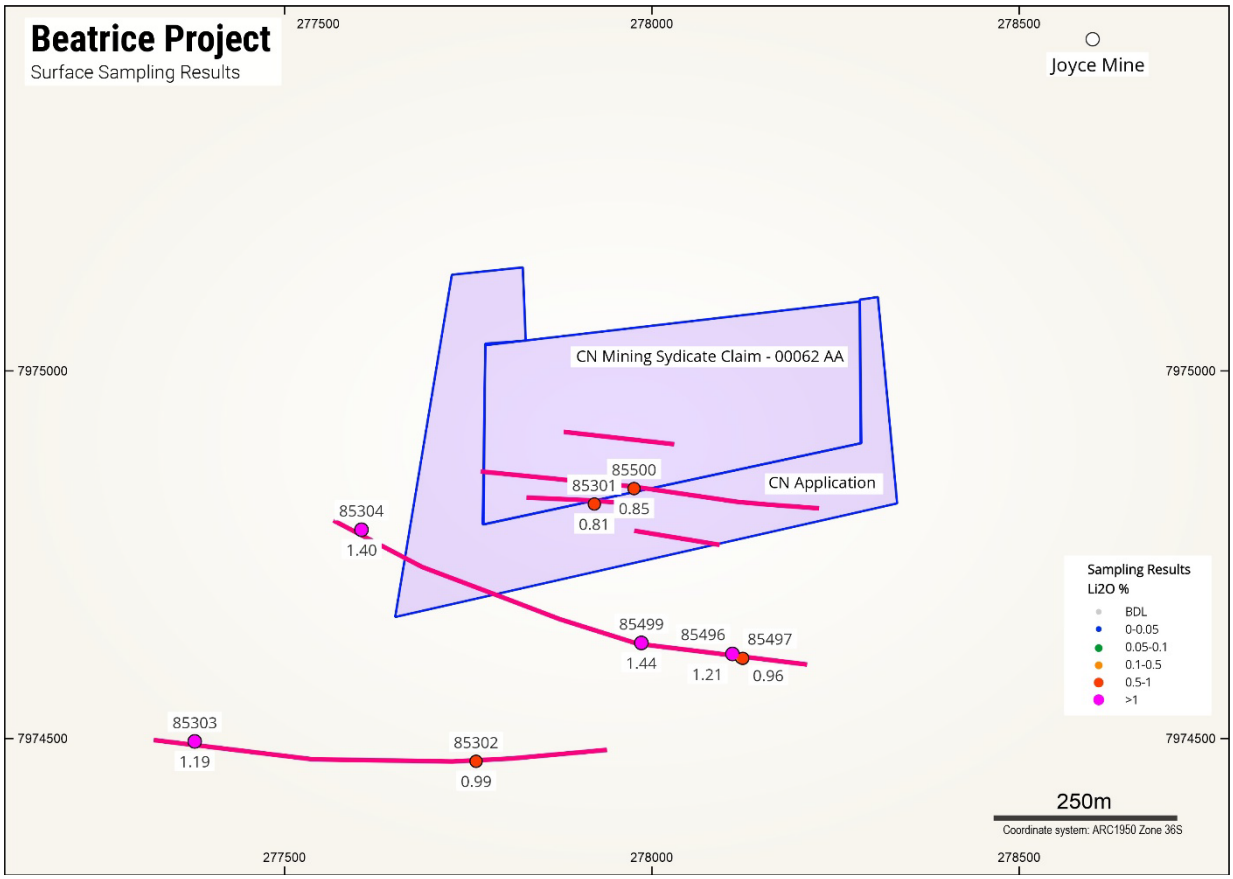

Figure 5: Map of Beatrice illustrating surface sampling locations and results.

Lepidolite, the lithium-bearing mineral observed in these samples, can be identified by its distinctive purple colour (Figures 6).

Figure 6: Rock chip sample ID: 85500 From MGA Tenement 0.85% Li_2O.

Next steps

As set out above, the work undertaken on Arcturas and Beatrice was of only an initial nature.

Geological mapping was undertaken with less detailed geological observations than would usually be the case. The initial site visit was primarily focussed on negotiating and acquiring the tenements.

Pathfinder elements commonly associated with lithium mineralisation, such as tantalum, potassium, and rubidium, were not included in the assay suite.

The company is planning further exploration work on these projects, including a site visit in June.

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

SHAREHOLDER ENQUIRIES
Mr Lijun Yang
Managing Director & CEO
MetalsGrove Mining Ltd
LijunY@metalsgrove.com.au

MEDIA ENQUIRIES
Sam Burns
SIX° Investor Relations
+61 400 164 067
sam.burns@sdir.com.au

About MetalsGrove

MetalsGrove Mining Ltd (ASX: MGA) is a global multi-metal resource exploration company focused on the exploration of its portfolio of high-quality lithium project in Zimbabwe and multi-metals projects including rare earth, copper-gold, manganese and base metal projects in Western Australia and the Northern Territory of Australia.

Figure 7: MetalsGrove Mining Ltd Global Exploration Projects location map.

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 Mr Lijun Yang who is currently a member of the Australian Association of Geologists (MAIG). Mr Lijun Yang is Managing Director and CEO of MetalsGrove Mining Limited.

Mr Lijun Yang 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 Lijun Yang consents to the inclusion in this announcement of the information contained herein, in the form and context in which it appears.

This announcement includes information that relates to Exploration Results prepared and first disclosed under the JORC Code (2012).

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.

Table 1 Assay results for all samples

Sample ID	Project	Easting	Northing	Li (ppm)	Li_2O (%)	Cs (ppm)
85301	Beatrice	277919	7975119	3750	**0.81**	470
85302	Beatrice	277758	7974769	4590	**0.99**	380
85303	Beatrice	277375	7974796	5530	**1.19**	590
85304	Beatrice	277602	7975084	6480	**1.40**	840
85401	Arcturas	314868	8031030	10	0	0
85402	Arcturas	315094	8031416	30	0.01	0
85403	Arcturas	315090	8031448	20	0	0
85404	Arcturas	315106	8031482	30	0.01	0

85405	Arcturas	315110	8031525	10	0	0
85406	Arcturas	315115	8031541	10	0	0
85407	Arcturas	315106	8031559	10	0	0
85408	Arcturas	315111	8031580	10	0	0
85409	Arcturas	315112	8031597	10	0	0
85410	Arcturas	315111	8031613	10	0	0
85411	Arcturas	315109	8031641	10	0	0
85412	Arcturas	315107	8031655	10	0	0
85413	Arcturas	315112	8031677	10	0	0
85414	Arcturas	315103	8031704	10	0	0
85415	Arcturas	315233	8032229	0	0	0
85416	Arcturas	315239	8032220	0	0	0
85417	Arcturas	315250	8032203	0	0	0
85418	Arcturas	315260	8032194	0	0	0
85419	Arcturas	315264	8032182	0	0	0
85420	Arcturas	315272	8032183	0	0	0
85421	Arcturas	315287	8032174	0	0	0
85422	Arcturas	315292	8032166	0	0	0
85423	Arcturas	315304	8032165	0	0	0
85424	Arcturas	315308	8032151	0	0	0
85425	Arcturas	315318	8032130	0	0	0
85426	Arcturas	315333	8032099	0	0	0
85427	Arcturas	315369	8032014	0	0	0
85428	Arcturas	315384	8032000	10	0	0
85429	Arcturas	315365	8031977	0	0	0
85430	Arcturas	315376	8031965	0	0	0
85431	Arcturas	315381	8031967	0	0	0
85432	Arcturas	315384	8031963	0	0	10
85433	Arcturas	315398	8031960	10	0	0
85434	Arcturas	315406	8031956	10	0	0
85435	Arcturas	315411	8031950	0	0	0
85436	Arcturas	315424	8031938	0	0	0
85437	Arcturas	315436	8031943	0	0	0
85438	Arcturas	315445	8031929	10	0	0
85439	Arcturas	315446	8031918	0	0	0
85440	Arcturas	315917	8031692	10	0	10
85441	Arcturas	315896	8031697	10	0	0
85442	Arcturas	315887	8031691	10	0	0
85443	Arcturas	315877	8031673	10	0	0
85444	Arcturas	315865	8031678	10	0	0
85445	Arcturas	315864	8031680	10	0	0
85446	Arcturas	315835	8031688	10	0	0
85447	Arcturas	315831	8031672	10	0	0
85448	Arcturas	315844	8031688	0	0	0
85449	Arcturas	315930	8031413	10	0	10
85450	Arcturas	315869	8031419	10	0	0
85451	Arcturas	316462	8031688	10	0	30
85452	Arcturas	316441	8031675	10	0	20
85453	Arcturas	316437	8031677	0	0	10
85454	Arcturas	316459	8031627	30	0.01	0
85455	Arcturas	316481	8031492	10	0	0
85456	Arcturas	316458	8031444	20	0	10
85457	Arcturas	316458	8031444	30	0.01	10

85458	Arcturas	316431	8031449	10	0	10
85459	Arcturas	316399	8031453	30	0.01	0
85460	Arcturas	316410	8031473	20	0	10
85461	Arcturas	316228	8031888	10	0	0
85462	Arcturas	316258	8031442	10	0	0
85463	Arcturas	316829	8031239	10	0	0
85464	Arcturas	316258	8031200	10	0	10
85465	Arcturas	316247	8031201	10	0	0
85466	Arcturas	316232	8031186	10	0	0
85467	Arcturas	316247	8031152	10	0	10
85468	Arcturas	316197	8031133	10	0	0
85469	Arcturas	316194	8031097	20	0	0
85470	Arcturas	316197	8031105	10	0	10
85471	Arcturas	316174	8031073	10	0	10
85472	Arcturas	316107	8031084	10	0	10
85473	Arcturas	316099	8031077	10	0	0
85474	Arcturas	316070	8031135	20	0	10
85475	Arcturas	316009	8031181	10	0	10
85476	Arcturas	315941	8031189	10	0	0
85477	Arcturas	315840	8031284	0	0	10
85478	Arcturas	315863	8031325	10	0	0
85479	Arcturas	315870	8031327	10	0	0
85480	Arcturas	315914	8031933	10	0	0
85481	Arcturas	316027	8032136	10	0	50
85482	Arcturas	315990	8032321	10	0	10
85483	Arcturas	316015	8032312	10	0	10
85484	Arcturas	317497	8034162	10	0	0
85485	Arcturas	317956	8034340	0	0	0
85486	Arcturas	316458	8031691	10	0	30
85487	Arcturas	316440	8031682	0	0	10
85488	Arcturas	315900	8031953	10	0	10
85489	Arcturas	316469	8031493	10	0	10
85490	Arcturas	316460	8031429	20	0	10
85491	Arcturas	316401	8931450	30	0.01	20
85492	Arcturas	315092	8031469	30	0.01	0
85493	Arcturas	315100	8031581	10	0	0
85494	Arcturas	315099	8031580	10	0	0
85495	Arcturas	315099	8031577	10	0	0
85496	Beatrice	278107	7974915	5640	**1.21**	470
85497	Beatrice	278121	7974909	4480	**0.96**	400
85498	Beatrice	278118	7974909	1640	**0.35**	140
85499	Beatrice	277983	7974930	6690	**1.44**	470
85500	Beatrice	277973	7975140	3970	**0.85**	340

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 specialized 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.*	• The rock chip samples were collected as 1-3 kg field samples from representative outcrops with the samples being collected from multiple sites from within a single outcrop to provide representivity of the samples.
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 included in 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*	• No drilling results included in release.

	preferential loss/gain of fine/coarse material.	
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.*	• All sample coordinates and photos were recorded by contracted field geologists. • There was no detailed geological observation was recorded
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.*	• The samples were crushed in Zimbabwe local lab of Performance Laboratories, Zimbabwe (PVT) Ltd at 85% passing 4.5mm to general coarse material. • Homogenously splitted, packed and stored 300-400g coarse material at for future reference. • Pulverised 300-400g of coarse material to generate the fine material with 85% passing 75 micron. • Homogenously splitted and packed 250g of pulverised fine material and shipped to ALS lab Johannesburg of South Africa.
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*	• The fine material samples were assayed at ALS lab Johannesburg of South Africa • The samples were assayed for selected element determination by Sodium Peroxide Fusion and dissolution

	instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, 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.*	followed by ICP-MS analysis with a method precision at ± 10 – 15%. • There were no QAQC samples submitted with these rock chip samples. • The Standard, blank and duplicated samples were added by ALS lab. • The sample size is considered to be appropriate for the material grain size.
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.*	• There has been no independent verification of the presented assay results or logging methodology.
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.*	• Rock chip sample locations were undertaken using a hand help GPS in WGS84 UTMZ 36S.
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.*	• The data spacing is sufficient for the reporting of first pass rock chip sample results.

Orientation of data in relation to geologic al 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.*	• The rock chip samples were collected from the exposed pegmatite outcrops or historical working site from Arcturas and Beatrice region area.
Sample security	• *The measures taken to ensure sample security.*	• The samples were delivered to the ALS Johannesburg, by contracted delivery company.
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 rock chip 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.*	• A total of 104 rock samples were collected from the region covered area of claim License Number: 000450AA, 005434AA, 016961BA, 016956AA and 016982BA. • Over one-third of the samples were collected from areas outside MetalsGrove's tenements. • There is a strategic agreement with third parties (JV agreements 95% MGA and 5% JV Partners La Rich Resources and CN Mining Syndicate). • There are no reserves or national parks to impede exploration on the tenure.
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.*	• This craton is bound by the Zambezi Belt to the north and north-east, the Limpopo Belt to the south, and the Mozambique Belt to the east. As opposed to the Kaapvaal Craton, the Zimbabwe Craton is composed predominantly of greenstone belts and subordinate granites and granitic gneisses (Wilson, 1981). The greenstone belts fall into three distinct stratigraphic groups. In order of younging these are • the Sebakwian. • the Bulawayan and • the Shamvaian. • The belts are associated with granitic rocks, ultramafic intrusions and a swarm of mafic dykes which culminated in the intrusion of the Zimbabwe Great Dyke at approximately 2.5 Ga (Wilson and Wilson, 1981). • The claims are within a greenstone belt in a foliated metabasaltic pillowed in part. Claims are located within the Goromonzi communal lands. The local geology is composed mainly of greenstone intruded by pegmatites which are mineralised with Be, Li, Sn and Ta. There is a metagabbro, massive and amphibolitized trending NW-SE to the southern part of the pegmatitic structures. Vee Cee and Guiney Bore old Mines are within claims boundaries and sitting on pegmatites. The greenstone is bordering foliated matadacite and andesite, locally with fragmental-like

		and taff-like horizons (t) and also tonalitic augen gneiss to the east. Some of the claims are within this contact zones where there is potential for gold mineralisation.
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 included in 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 equivalent values should be clearly stated.*	• No data aggregation methods were applied to the rock chip sampling data.
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.*	• The pegmatite samples are representative of the outcrops.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should*	• See maps in the body of the report.

	include, but not be limited to a plan view of drillhole collar locations and appropriate sectional views.	
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 rock chip 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.*	• There are no other substantive exploration results associated with these rock chip samples.
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.*	• Further site visit was planned as needed. • Drilling will be planned subject to further exploration results. • The images included show the location of the current areas of interest