Spodumene Identified, LCT Pegmatite Confirmed for Badja Project, Yalgoo WA

19 September 2023

EMU NL

RARE EARTHS ELEMENTS, PRECIOUS AND BASE METALS EXPLORER

Following a review of its Badja Project's structural and geochemistry datasets by eminent, consulting geologist, Mr Nigel Maund, EMU NL (ASX: EMU) ("**EMU**" or "**the Company**") advises that a limited field survey conducted 4 September 2023 identified the presence of **LCT (Lithium-Cesium-Tantalum) pegmatites.** Assessment **confirms spodumene crystals** with LIBS[1] analyser equipment **confirming anomalous lithium grade**.

HIGHLIGHTS

- **LCT pegmatite** occurrence positively identified at Badja whilst testing prospectivity for LCT pegmatitic dyke swarms emanating from intrusive fractionated granite sources adjacent to Badja's mafic lithologies.
- **Spodumene crystals** in identified with characteristic pink fluorescence under long wavelength ultraviolet UV lamp.
- Anomalous LIBS analyser lithium readings of **0.31% Li_2O.**
- LCT pegmatite occurrences at Badja are thought to emanate from discrete highly fractionated, late-stage granite plutons.

LIBS analyser testwork of sample rock, the UV fluorescing of spodumene and the visual identification of the crystal morphology support the presence of lithium-bearing spodumene crystals contained in mafic rock sample returned from the field. The LIBS analyser reading on the hand samples have obtained values of **1,426ppm Li (equivalent to 0.31% Li_2O**), see Figure 1 below.

[1] LIBS (Laser Induced Breakdown Spectroscopy) using Sci-Aps Z-903 LIBS with integrated argon purge, plus UV diagnostic testing of spodumene samples using a Analytik Jena 6W UV handheld UV lamp. Refer to JORC Table attached for further details

Fig 1 – Hand-specimen of spodumene crystals in LCT pegmatite showing strong pink fluorescence, a characteristic feature under long-wavelength UV light.

Mr Maund was commissioned in July 2023 to investigate the importance of the regional granite intrusive bodies surrounding the project area.[2] EMU's geologists now posit that the late-stage, fractionated, intrusive granite plutons, identified primarily from airborne geophysical surveys, are the key drivers of high-grade gold and tungsten occurrences at Badja. The investigation by Mr Maund revealed **major LCT Pegmatite pathfinder geochemistry and element associations in historic and recent EMU geochemistry data** relevant in the context of his overall interpretation and an exploratory field trip was instigated.

Mr Maund has global experience in the exploration for and discovery of lithium pegmatites among other commodities. His study supports EMU's view that the late-stage granite intrusions within the broad granitic suites adjacent to Badja project had a significant influence in the mineralisation at Badja. The endowment of high-grade gold and tungsten mineralisation discoveries made by EMU, and the historic Gnows Nest Gold Mine, have been emplaced through multiple events of hydrothermal activity derived from these evolving and fractionating "granite intrusive stocks".

[2] Report by Mr Nigel Maund BSc (Hons)Lond., MSc, DIC, MBA, F.Aus.IMM, FAIG, F.SEG, FGS, MMSA, Consultant Economic Geologist "A Report on Badja Gold Project Area Near the Historic "Gnows Nest" Gold Mine, Wadgingarra Gold Field, Badja Station, Western Australia", 25 August 2023

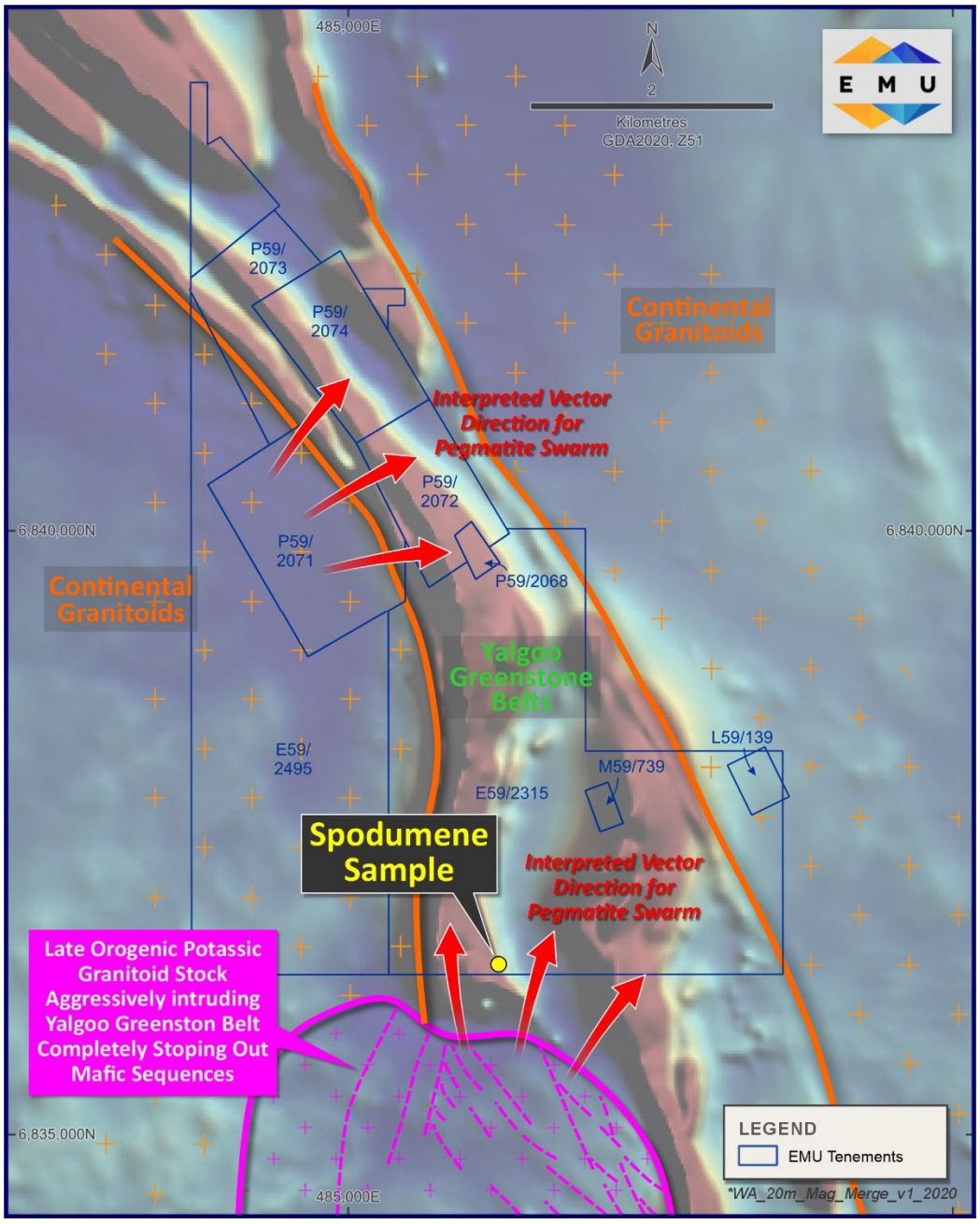

Fig 2 – Conceptual model for LCT pegmatites in the western and southern intrusive-mafic contacts at Badja. Multi-element geochemistry, particularly the immobile elements (eg., Rb, Cs & Be) supports a late-stage fractionated granite source. Note location of sample and spodumene specimen reported in this announcement.

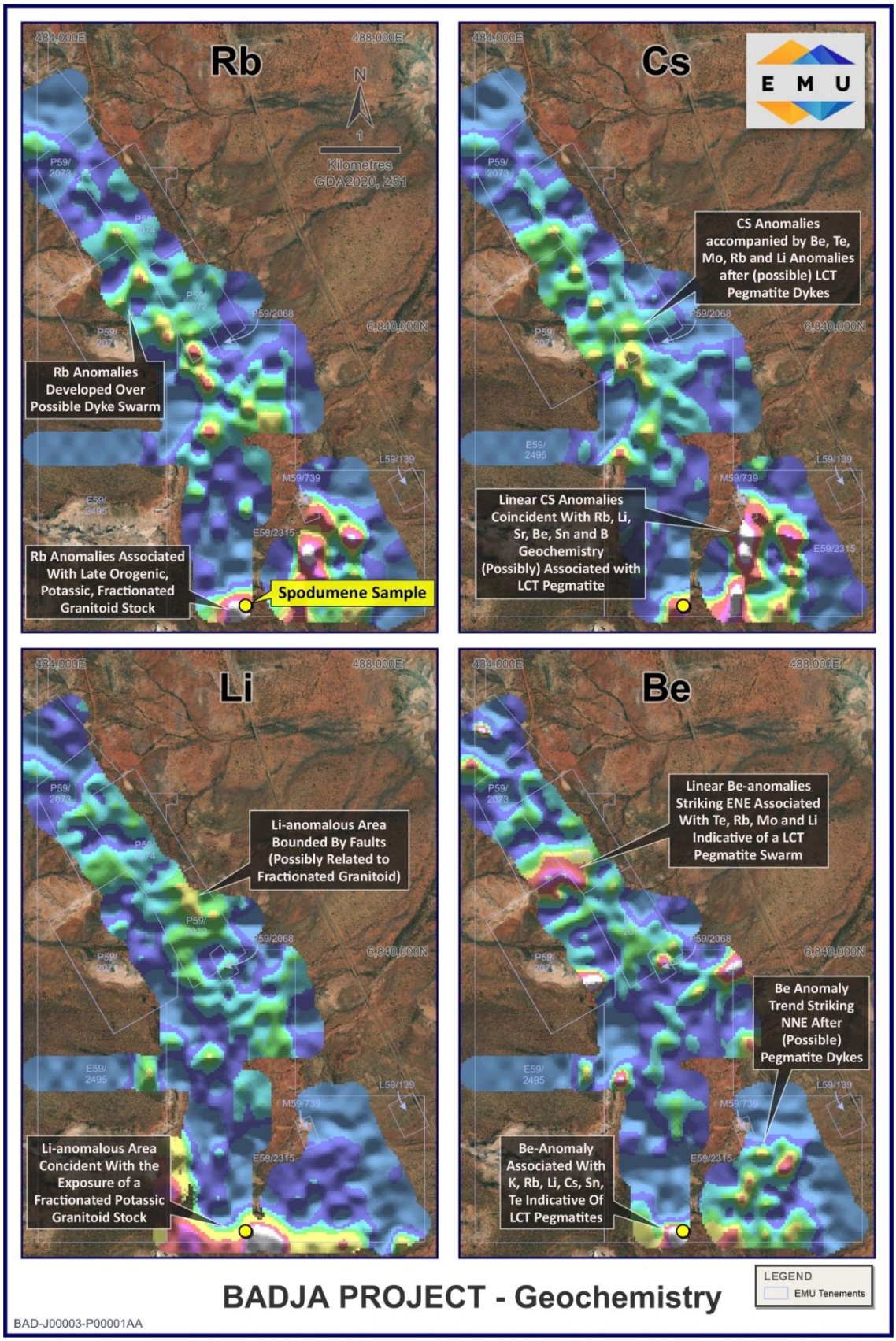

Fig 3 – Multi-element geochemistry for Lithium (Li) + LCT pegmatite pathfinder elements Rubidium (Rb) Caesium (Cs) & Beryllium (Be). Note strong presence along the southern intrusive contact and (postulated) NE-trending dyke swarms.

RELEASE AUTHORISED BY THE BOARD

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Investors can sign into our interactive investor hub and join in on the conversation with Emu NL.
https://investorhub.emunl.com.au/auth/signup

EMU Investorhub QR Code

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Fully paid shares (listed)

1,450,021,079 (including 18.6m the subject of the ATM which EMU can buy back for nil consideration)

Contributing Shares (listed)

40,485,069 paid to $0.03, $0.03 to pay, no call before 31 December 2023

Contributing Shares (Unlisted)

35,000,000 paid to $0.0001, $0.04 to pay, no call before 31 December 2025

Options (unlisted)

172,453,621 options to acquire fully paid shares, exercisable at $0.01 each, on or before 7 October 2024

Performance Rights (Unlisted)

48,571,429 performance rights in relation to acquisition of Gnows Nest project

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COMPETENT PERSON'S STATEMENT

The information in this report that relates to exploration results is based on, and fairly represents information and supporting documentation prepared by Nigel Maund, a Competent Person who is a Fellow of the Australian Institute of Geoscientists and a Fellow of Australian Institute of Mining and Metallurgy. Mr Maund is a consulting geologist commissioned by EMU NL and has sufficient experience in the activity which he is undertaking 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 Maund consents to the inclusion herein of the matters based upon his information in the form and context in which it appears.

FORWARD LOOKING STATEMENTS

As a result of a variety of risks, uncertainties and other factors, actual events and results may differ materially from any forward looking and other statements herein not purporting to be of historical fact. Any statements concerning mining reserves, resources and exploration results are forward looking in that they involve estimates based on assumptions. Forward looking statements are based on management's beliefs, opinions and estimates as of the respective dates they are made. The Company does not assume any obligation to update forward looking statements even where beliefs, opinions and estimates change or should do so given changed circumstances and developments.

NEW INFORMATION OR DATA

EMU confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements and, in the case of estimates of Mineral Resources, which all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not materially changed from the original market announcement.

JORC Code 2012 Edition Table 1:
Section 1 - Sampling Techniques and Data

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.*	• The lithium-based exploration in LCT-pegmatites described in this announcement is recent (2023) work conducted by Emu personnel and Consultant Economic Geologist Mr Nigel Maund. • The soil and rock chip geochemistry referenced in this work was carried out by Emu NL within the confines of the Badja Project over the period 2020-2023. • All sample positions were located in the field with a handheld Garmin GPS. • UV diagnostic testing of spodumene samples was conducted using a Analytik Jena 6W UV handheld UV lamp. • LIBS (Laser Induced Breakdown spectroscopy) was conducted using a Sci-Aps brand Z-903 handheld analyser. Appropriate use of CRM pucks (standards) was made during and after the sample readings. • Surface sampling was carried out by Company personnel following protocols and QAQC procedures as per current industry practice. See further details below. • Soil samples: Sampling undertaken in a nominal 100 x 50m grid-based spacing along East-West orientated lines (100m line spacings and 50m sample spacings). All samples were collected by scraping off the top 20cm aeolian/colluvium material and digging a 20-40cm pit below this from which a 1000g minus 2mm (sieved) sample was obtained. This was split into a 1kg portion for laboratory analysis and a smaller 250g sample for in-house pXRF analysis and storage. Emu samples total 1153 samples and this is added to a further 4470 historical samples which were processed and levelled by a consultant geochemist for meaningful comparison. • Rock chip samples: Sampling undertaken in various campaigns with 1-2kg of insitu rock chips collected over discrete points,

Criteria	JORC Code explanation	Commentary
		channels, panels or other method as described in the sample data sheet. • All surface samples were prepared and assayed by ALS Geochemistry, located in Malaga, Perth. (i) Soil samples prepared by PUL-32 (pulverise entire sample) and analysed by 25g aqua regia digest, method AuME-TL43 (ii) Rock samples prepared by method PREP-31Y in which a split of 250g was pulverised and analysed for gold by Au-ICP21 (30g fire assay) and multi-elements ME-MS61 (33 element 4-acid digest ICP-AES finish).
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 undertaken in the work undertaken for this announcement.
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.* • *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.*	• Not applicable.
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.*	• Geological logging of soil and rock chip samples was completed on a visual basis with parameters which include: - Colour - Grain size - Llithology type - Weathering - Mineralogy.
Sub-sampling techniques	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled,*	• No drilling completed. • Geostats and/or OREAS brand QA/QC certified reference samples, blanks and

Criteria	JORC Code explanation	Commentary
and sample preparation	*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 maximise 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.*	field duplicates were routinely inserted at a rate of 1 in 15 with every batch submitted for assay. • The sample size is appropriate for the mineralization style, application and analytical techniques used.
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.* • *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.*	• LIBS: A Sci-Aps Z-903 field portable LIBS analyser was used for testing of pegmatite samples and spodumene crystals evident in hand specimens. • Soils: ALS's trace-level exploration analytical technique AuME-TL43 is a partial digestion in aqua regia of a 25g sample of the pulverised soil sample (this compares to 0.25g in most other techniques). The technique is considered a partial digest, but fully acceptable and repeatable for oxidised surface soil samples. • Rocks: standard 30g fire assay and 4-acid digest multi-element techniques are industry norms for rock chip samples. These are considered total digestion. • The assay techniques employed, the detection limits offered and the QA/QC procedures in place are considered fully appropriate for the soil and rock sampling reported.
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.*	• Assays are as reported from the laboratory and stored in the company database, managed by an independent database consultant. • Field data was collected on site either on a company Toughbook (laptop computer) or on field sample books and later uploaded to the database. • No adjustment has been made to the

Criteria	JORC Code explanation	Commentary
		assay data as reported by the laboratory. • LIBS data displayed as Li (ppm) was converted to Li_2O% using a conversion factor of 2.153 (i.e., Li_2O% = Li (ppm) x 2.153
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.* • *Quality and adequacy of topographic control.*	• Soil and rock sample positions were located using a handheld GPS system with an accuracy of +/- 5m and stored in the company database. All coordinates are referenced to MGA Zone 50, Datum GDA94.
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 was undertaken on a GPS-controlled grid (nominally 100m line spacing x 50m sample spacing). • Rock samples were collected where rock was exposed at surface.
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.*	• No sampling bias is known.
Sample security	• *The measures taken to ensure sample security.*	• Each sample was placed into a pre-numbered calico bag (soils and rocks), and securely tied off and placed into a larger "polyweave" bag for dispatch to the lab. Samples were transported to the laboratory by company personnel.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Continuous improvement, internal reviews of sampling techniques and procedures are ongoing. No external audits have been performed on the methodology to date.

JORC Code 2012 Edition Table 1:
Section 2 - Reporting of Exploration Reports

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 tenure hosting the Badja Project and the location of the spodumene sample reported in this news release is owned 100% by EMU NL (or its subsidiary companies Coruscant Minerals Pty Ltd, Emu Resources Pty Ltd & Emu Exploration Pty Ltd): • The project comprises a total of ten granted tenements (see listing below): M59/739 Coruscant Minerals E59/2315 Coruscant Minerals P59/2071 Emu Exploration P59/2072 Emu Exploration P59/2073 Emu Exploration P59/2074 Emu Exploration P59/2068 Emu Exploration E59/2495 Emu Exploration E59/2817 Emu Resources E59/2836 Emu Resources • All works undertaken and reported in this ASX announcement were completed within these tenements. • The project tenements are all in good standing.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Historical prospecting, sampling and drilling activities have been undertaken in different areas within the project tenements intermittently by multiple third parties over a period of at least 30 years.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The project lies within an attenuated portion of the Yalgoo-Singleton greenstone belt bound by the Badja and Walgardy intrusive granitoid batholiths of the Youanmi Terrane. The Gnows Nest and Monte Cristo prospects comprise the areas where Emu NL have reported Mineral Reserve Estimates (MRE) within lode-hosted orogenic gold deposits, similar to many of the gold occurrences in the Yalgoo region, and within the WA Yilgarn Craton. The areas of interest described in this announcement pertain to pegmatite occurrences located on the western granite/greenstone intrusive contact.

Criteria	JORC Code explanation	Commentary

Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:*
	  ○ *easting and northing of the drill hole collar*
	  ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*
	  ○ *dip and azimuth of the hole*
	  ○ *down hole length and interception depth*
	  ○ *hole length.*
	• *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*
		• No drilling undertaken in the work undertaken for this announcement.

Data aggregation methods	• *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 examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Not applicable.
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').*	• Not applicable.
Diagrams	• *Appropriate maps and sections (with*	• Refer to maps and figures in body of the

Criteria	JORC Code explanation	Commentary
	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.	announcement. • Geological interpretations are based on current knowledge and will change with further exploration.
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.*	• Key findings and location information has been reported in body of text. Assays are being awaited. • Reporting is considered balanced.
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.*	• Geological interpretations have been taken from published maps, geophysical interpretation, historical and ongoing exploration.
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.*	• Further field programmes and follow-up work will be assessed pending laboratory analytical results.

- END -