

## **AMENDED ASX RELEASE**

Pursuant to a request made by ASX, Emu NL hereby resubmits the ASX Release made on 7 March 2022.

This announcement now includes JORC Tables as required to be attached as an annexure by the ASX Listing Rules.

## **RELEASE AUTHORISED BY DOUG GREWAR**

Contact Details: Doug Grewar - Office: +61 8 9226 4266; Mobile: 0419 833 604

E info@emunl.com.au

- END -

## **EMU NL**



Promising Nickel Drill Targets Emerge from Electromagnetic Surveys at WA Wheatbelt Projects

15 March 2022 – Amended 7 March 2022 ASX Release – Includes JORC Tables

#### **EMU Directors Statement**

"The recent EM surveys of EMU's Graceland and Viper projects in the southwest of WA delineate, significant, electromagnetic anomalisms which coincide with geochemical anomalisms, giving the board greater confidence in these drill targets. With the Russian invasion of Ukraine leading to swift, unprecedented sanctions, and Russian nickel seemingly off global markets for the foreseeable future, the price of nickel has soared to 11-year highs, generating great interest in possible new nickel discoveries, such as EMU promises."

## **Highlights**

## GRACELANDS PROJECT, near Hyden, WA

- EMU to drill test significant conductors identified from its Fixed Loop Electromagnetic (FLEM) survey
- The EM conductors and drill target area are coincident with a regional gravity high and anomalous geochemical nickel-copper-chromium trend
- RC drill programme to test relatively shallow nickel sulphide targets
- Reprocessed magnetic data improves interpretation of mafic-ultramafic flows and assists drill target vectors
- Multiple electromagnetic (EM) conductors align with eastern margin of interpreted ultra-mafic unit pointing to the heightened prospectivity of this ~3km of strike
- EMU has made further application for exploration licences adjoining Graceland to cover prospective aeromagnetic and gravity extensions
- Follow-up FLEM programme planned to extend and delineate further drill targets
- EMU is in discussions with drill contractors and has identified suitable rigs for early commencement of drilling, permitting contingent

## VIPER PROJECT, NEAR Jerramungup, WA

- EMU to drill test significant conductors identified from its FLEM survey
- EM conductors are coincident with geochemical nickel and copper anomalism
- RC drill programme will target interpreted nickel sulphide EM conductors
- RC drill programme to follow RC drilling completion at Graceland

EMU NL



EMU NL, (**EMU** or the **Company**, ASX:EMU), is very pleased to provide an announcement of interpreted results from Fixed Loop Electromagnetic (FLEM) surveys recently completed at its Graceland and Viper Nickel-Copper-PGE Projects, both located in the WA wheatbelt near Hyden and Jerramungup respectively. (Fig. 1)

EMU's systematic and highly successful exploration approach which included reprocessing magnetic data, auger drilling for soil geochemistry, rock chip sampling, mapping and FLEM geophysics surveys have established coincident anomalies representing very promising drill targets at both Graceland and Viper projects. Significantly, soil geochemistry and geophysical magnetic anomalies coincide at each project, thereby elevating confidence in the targets. Planning is underway for a 2500 – 3000m RC drill programme to test these highly prospective targets in Q2 2022.

#### **GRACELAND PROJECT**

EMU engaged its geophysical consultants, Resource Potentials, to undertake reprocessing of EMU's magnetic data to obtain clearer resolution of the **anomalous magnetic feature** which lies "blind", under cover and beneath an active farming property. The results of this work identified a potential mafic-ultramafic unit which is also coincident with a regional gravity high.

EMU completed a 3 loop FLEM survey during February, targeting bedrock magmatic nickel sulphide mineralisation. The processed EM data delineated a series of **significant EM conductors** located along the eastern margin of the interpreted ultramafic (magnetic) unit which, significantly, are further **coincident with auger soil nickel, copper and chrome geochemical anomalism** (see Fig. 2) The multi-element geochemical distribution was identified by EMU in 2021 following a systematic auger drilling programme<sup>1</sup>.

EMU will target the relatively shallow EM conductors at Graceland with a planned ~2500m RC drilling programme designed to test for nickel sulphide mineralisation. EMU will extend the cover of the FLEM geophysical surveying with the completion of an additional (single loop) FLEM to add additional definition for drill positioning.

Following the success of the geophysics work in early 2022, EMU applied for an additional exploration licence totalling 10 blocks, contiguous to the Graceland Project. This new application area also has the characteristic regional gravity and aeromagnetic properties considered prospective for nickel mineralisation.

## **VIPER PROJECT**

A single loop FLEM geophysical survey was completed at the Viper Project covering the historic Netty Copper Mine and surrounding areas including the parallel mafic dyke system and multi-element geochemical anomalism delineated in EMU's successful auger drilling programme in 2021.<sup>2</sup> Three EM conductors have been delineated, two of which are coincident with elevated copper and nickel occurrences identified in the auger soil geochemistry. (Fig. 3)

<sup>&</sup>lt;sup>1</sup> See ASX Announcement, "Letter to Shareholders", 20 July 2021

<sup>&</sup>lt;sup>2</sup> See ASX Announcement, "Significant Copper Anomalism Defined at Viper Project", 8 June 2021



EMU has planned an initial ~500m RC drilling programme targeting the three shallow EM conductors for nickel sulphide mineralisation. EMU will also drill to test extensions of the mineralised zones beneath the historic high-grade Netty Copper Mine looking for zones of broad disseminated copper and seeking a greater understanding of the setting and mineralisation style.

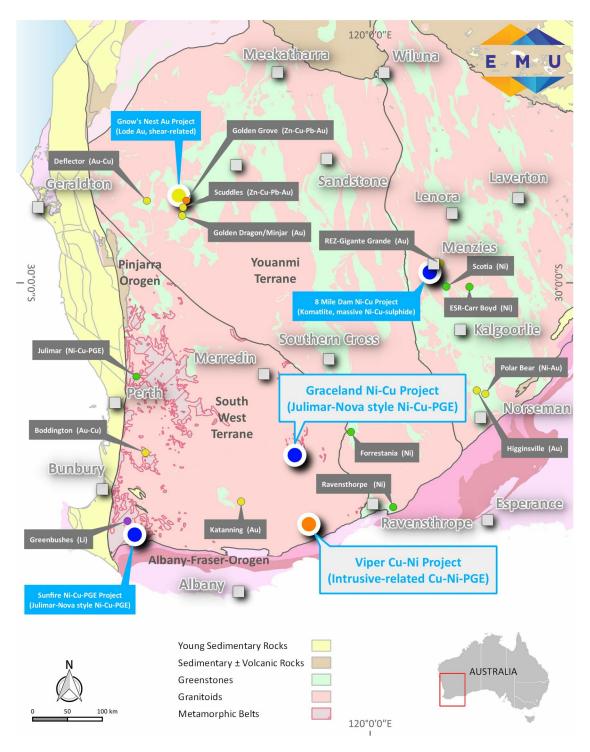


Fig 1 EMU project location map with Graceland and Viper projects highlighted in the Southwest Terrane of the Yilgarn Craton



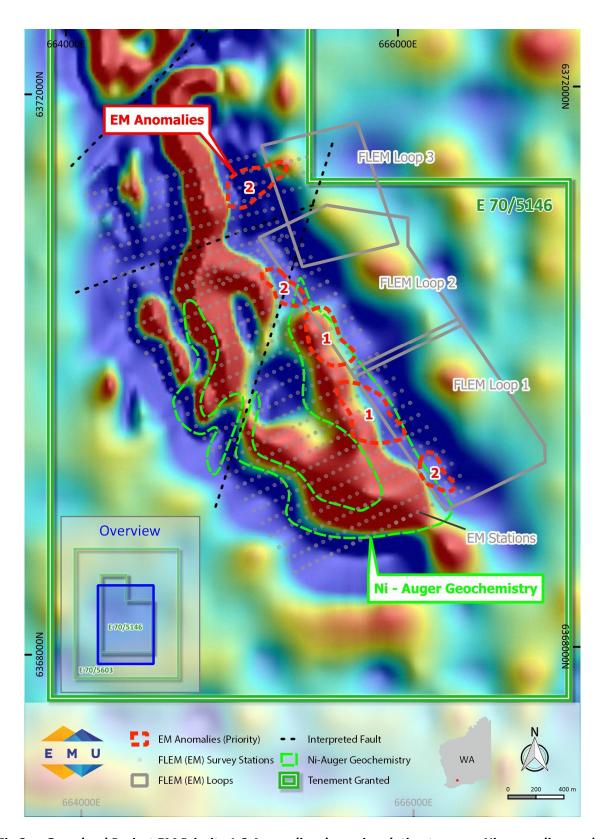


Fig 2 Graceland Project EM Priority 1-2 Anomalies shown in relation to auger Ni-anomalism and reprocessed aeromagnetics. EM anomalies are relatively strong later-time X component response observed through EM time channels 27 - 32 (28 - 82 msec after transmitter current turn-off)



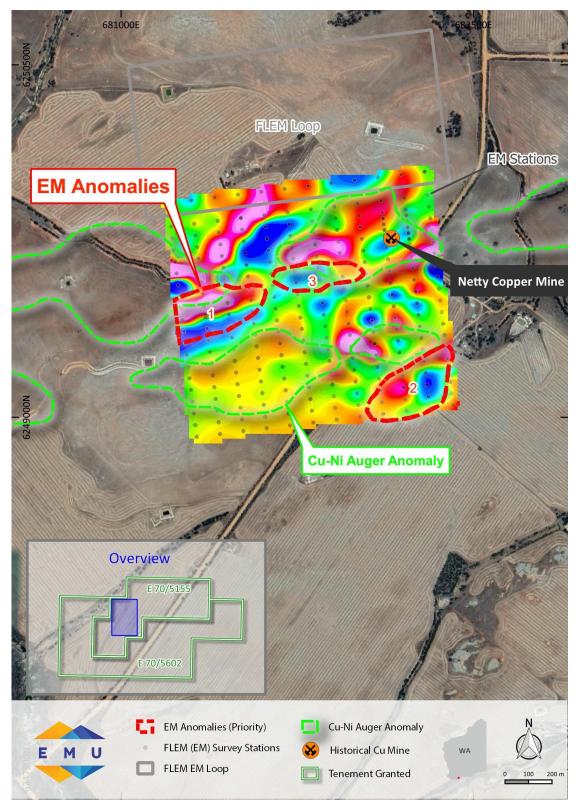


Fig 3 Viper Project EM Priority 1-2-3 Anomalies shown in relation to Cu-Ni Auger Geochemistry.

The EM anomalies are relatively strong early to mid-time X component observed in EM time channels 1 - 18 (0.1 - 4 msec after transmitter current turn-off)

## **RELEASE AUTHORISED BY THE BOARD**

Contact Details: Doug Grewar - Mobile: 0419 833 604



#### Emu NL

ABN 50 127 291 927

**ASX Codes: EMU and EMUCA** 

10 Walker Ave West Perth, WA 6005

T+61 8 9226 4266 E info@emunl.com.au

PO Box 1112 West Perth, WA 6872

#### Fully paid shares (listed)

549,814,484 (including 18.6m 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 31/12/2023

#### **Options (unlisted)**

33,320,000 options to acquire fully [paid shares, exercisable at \$0.075 each, expiry 15/3/2023

35,000,000 options to acquire partly paid shares, exercisable at \$0.0001 each, expiry 15/11/2022

## Performance Rights (Unlisted)

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

#### **Directors:**

## **Peter Thomas**

Non-Executive Chairman

## **Terry Streeter**

Non-Executive Director

#### **Gavin Rutherford**

Non-Executive Director

## **Tim Staermose**

Non-Executive Director

## Investor enquiries:

## **Doug Grewar CEO**

M +61 419833604 E info@emunl.com.au

The information in this report that relates to exploration results is based on, and fairly represents information and supporting documentation prepared by Francisco Montes, a Competent Person who is a Member of the Australian Institute of Geoscientists. Mr Montes is an employee of 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 Montes consents to the inclusion herein of the matters based upon his information in the form and context in which it appears.

#### FORWARD LOOKING STATEMENTS

COMPETENT PERSON'S STATEMENT

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 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 2012 Table – Section 1: Sampling Techniques and Data

| Criteria            | JORC Code explanation   | Commentary   |
|---------------------|---|--|
| Sampling techniques | <ul> <li>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.</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 (e.g., '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 (e.g., submarine nodules) may warrant disclosure of detailed information.</li> </ul> | Summary of FLEM geophysics surveys and parameters employed at Graceland and Viper projects:  Resource Potentials Pty Ltd was contracted by Emu NL to manage the survey work and process the raw data.  Vortex Geophysics Pty Ltd were contracted to survey selected portions of the Graceland and Viper projects.  All surveys completed by Fixed Loop Electromagnetic (FLEM) configuration using a series of 1,100m x 750m and 900m x 600m fixed loops, with readings taken along 100m spaced lines and 50m station intervals  Survey equipment included a 75KVA ABLE power generator, an Ametek Power Module (2 x 500v/100A modules wired in series) a Vortex VTX100 TEM transmitter and 2 EMIT SMART EM 24 fluxgate B-Field sensors.  Surveys by FLEM configuration using a 1 Hz frequency square sine wave, a battery powered transmitter conducting a current of 55-60A through PVC coated 16mm² copper cables on fixed transmitter loops and measured on a standard fluxgate sensor combined with an EMIT SMART EM24 receiver.  Measurements consisted of the three components of the B field response.  A total of 12.0 line kms of geophysical data was acquired at Viper with utilising a single FLEM loop, and 36.5 line kms at Graceland with 3 FLEM loops.  The survey lines were run approximately perpendicular to stratigraphy (as defined by the aeromagnetic interpretation and GSWA mapping). All lines and station positions were located in datum GDA94 and projection UTM Zone 50 for both Viper and Graceland.  Data quality control was carried out on a daily basis by Vortex personnel on-site, as well as Vortex and Resource Potentials geophysicists in Perth.  Data processing and interpretation was carried out by Resource Potentials swhich also managed the survey for Emu NL.  No drilling or geochemical sampling undertaken or reported herein. |



| Criteria  | JORC Code explanation  | Commentary                       |
|---|--|----------------------------------|
| Drilling<br>techniques                                  | Drill type (e.g., core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, facesampling bit, or other type, whether core is oriented and if so, by what method, etc).   | No drilling undertaken/ reported |
| Drill sample<br>recovery                                | <ul> <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>   | No drilling undertaken/ reported |
| Logging   | <ul> <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>   | No drilling undertaken/ reported |
| Sub-sampling<br>techniques<br>and sample<br>preparation | <ul> <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 subsampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul> | No drilling undertaken/ reported |
| Quality of<br>assay data<br>and<br>laboratory<br>tests  | <ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>   | No drilling undertaken/ reported |



| Criteria  | JORC Code explanation  | Commentary                       |
|---|--|----------------------------------|
| Verification<br>of sampling<br>and assaying                         | <ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>  | No drilling undertaken/ reported |
| Location of data points   | <ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>  | No drilling undertaken/ reported |
| Data spacing<br>and<br>distribution                                 | <ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>                                | No drilling undertaken/ reported |
| Orientation<br>of data in<br>relation to<br>geological<br>structure | <ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul> | No drilling undertaken/ reported |
| Sample security   | The measures taken to ensure sample security.  | No drilling undertaken/ reported |
| Audits or reviews   | The results of any audits or reviews of sampling techniques and data.  | No drilling undertaken/ reported |

## JORC 2012 Table – Section 2: Reporting of Exploration Reports

| Criteria   | JORC Code explanation  | Commentary   |
|--|--|--|
| Mineral<br>tenement and<br>land tenure<br>status | <ul> <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> <li>The Graceland Project is located within Exploration Licences E70/5146 and E70/5603.</li> <li>The Viper Project is located within Exploration Licences E70/5155 and E70/5602.</li> <li>All tenements are 100% owned by Emu Resources Pty Ltd, a wholly owned subsidiary of EMU NL.</li> <li>No known issues exist with the project tenure.</li> <li>The project tenements are all in good standing.</li> </ul> |



| Criteria                                | JORC Code explanation   | Commentary  |
|---|---|---|
| Exploration<br>done by other<br>parties | Acknowledgment and appraisal of exploration by other parties. | Previous exploration completed at Graceland includes a detailed ground magnetics geophysics survey completed over the northern portion of the E70/5146 tenement, and limited RAB geochemistry as previously reported in EMU ASX Announcement, "Emu secures Highly prospective Exploration Portfolio in WA", 28 September 2020.  Graceland Project:  |
|   |   | <ul> <li>Magnetic Resources NL conducted RAB drilling in a single traverse of 7 shallow holes for a total of 34m (11m max depth). Hole spacing was 100-150m and most holes were drilled to 2-4m depth and are considered soil samples.</li> <li>Assays completed by Ultra Trace Pty Ltd, Perth.</li> <li>Sample preparation comprised sorting, drying, and splitting where necessary, with pulverization in a disc pulverizer.</li> <li>Sample analyses was completed for a 10-element suite comprising Au, Pt, As, Co, Cu, Ni, Cr, Zn, Mn, U. Analytical methods include aqua regia digest with ICP-MS for Au, Pt, As, Co, U and ICP-OES for Cu, Ni, Cr, Zn, Mn</li> </ul> |
|   |   | Previous exploration at Viper was limited to rock chip sampling at the historic Netty Mine and sporadic regional sampling as described in the ASX announcement of 28 September 2020:  |
|   |   | <ul> <li>Exploration at the Netty Copper Mine was confined to underground sampling over a portion(?) of the collapsed underground workings by Audax Resources in 1988. Limited sampling along fence lines, and public access tracks was also conducted by Southern Mineral Resources Pty Ltd over the period 2013-2016.</li> <li>Sample analyses was completed by Amdel Laboratories, Perth for a 6-element suite including Au, Pt, Pd, Cu, Ni, Ag. Sample preparation and assay techniques were not stated.</li> <li>No systematic surface exploration</li> </ul>  |
|   |   | around Netty or extensions of the Netty mafic dykes were undertaken prior to Emu. Pancontinental Mining Corporation Pty Ltd conducted E-W soil traverses in the far-eastern portions of the tenement over the period 2007 – 2010.   |



| Criteria   | JORC Code explanation   | Commentary  |
|--|---|---|
| Geology  | Deposit type, geological setting, and style of mineralisation.  | <ul> <li>Both Graceland and Viper are greenfield exploration projects, and the source of surface mineralisation can only be speculation at this stage.</li> <li>Graceland Project:         The mineralisation targeted is Ni-Cu-PGE within blind mafic to ultramafic intrusives.     </li> <li>Viper Project:         Cu-Ni mineralisation targeted within intrusives and contact (shear) settings.     </li> <li>The tenements lie within Western Gneiss Terrane and the southwest Yilgarn Province.</li> <li>The majority of the Graceland E70/5146 and Viper E70/5155 tenements are soil (regolith) covered in areas of crop farming.</li> </ul> |
| Drill hole<br>Information  | <ul> <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> <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> <li>No conventional drilling completed at this time.</li> <li>Emu's auger soil sampling programme were previously reported in ASX Announcement "Significant Copper Anomalism Defined at Viper project", 8 June 2021 and ASX "Letter to Shareholders", 20 July 2021.</li> </ul>   |
| Data<br>aggregation<br>methods   | <ul> <li>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.</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 examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>  | No drilling undertaken/ no drill assays at this time.   |
| Relationship<br>between<br>mineralisatio<br>n widths and<br>intercept<br>lengths | <ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement</li> </ul>   | No drilling undertaken/ no drill assays at this time.   |



| Criteria                                    | JORC Code explanation  | Commentary   |
|---|--|--|
|   | to this effect (e.g., 'down hole length, true width not known').   |  |
| Diagrams                                    | <ul> <li>Appropriate maps and sections (with scales) and<br/>tabulations of intercepts should be included for<br/>any significant discovery being reported These<br/>should include, but not be limited to a plan view<br/>of drill hole collar locations and appropriate<br/>sectional views.</li> </ul>  | <ul> <li>Drill hole maps and sections N/A</li> <li>Appropriate maps describing the FLEM survey layouts and results included in the body of the announcement.</li> </ul>  |
| Balanced<br>reporting                       | Where comprehensive reporting of all Exploration<br>Results is not practicable, representative<br>reporting of both low and high grades and/or<br>widths should be practiced to avoid misleading<br>reporting of Exploration Results.  | • N/A  |
| Other<br>substantive<br>exploration<br>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.                          | No other meaningful data to report.  |
| Further work                                | <ul> <li>The nature and scale of planned further work         (e.g., tests for lateral extensions or depth         extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of         possible extensions, including the main geological         interpretations and future drilling areas, provided         this information is not commercially sensitive.</li> </ul> | <ul> <li>Emu's exploration plans for each of the Graceland and Viper projects are detailed in the body of the announcement.</li> <li>Upon completion of the FLEM geophysics surveys Emu will follow-up resultant anomalies EM anomalies with further in-fill EM surveys and RC drill testing.</li> <li>Diagrams have been included in the body of the current announcement.</li> </ul> |