

# **ANT Geophysics Commences at Emmie IOCG – Additional Information**

Coda Minerals Ltd ("Coda" or "the Company") (ASX: COD) refers to the release "ANT Geophysics Commences at Emmie IOCG" released on 12 January 2023.

Following consultation with ASX, the announcement is hereby re-released to include a reference to the original market release quoting the Mineral Resource Statement noted on page 6 in the "About Coda" Section.

Please see the addition of footnotes 1-4 and Confirmatory Statement in the "About Coda" section of the attached announcement.

This announcement has been authorised for release by the Board of Coda Minerals Ltd

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# **ANT Geophysics Commences at Emmie IOCG**

Deployment of cutting-edge technology marks next stage of exploration of vast copper-bearing system

# **Highlights**

- Ambient Noise Tomography (ANT) survey has commenced at Emmie Bluff, covering the Emmie IOCG copper-gold discovery and the Emmie Bluff copper-cobalt deposits.
- The ANT survey marks a pivotal new phase of work in the hunt for structure and thickness at Emmie IOCG.
- The advanced passive seismic technique will produce a detailed sub-surface velocity map to assist in the identification of IOCG mineralisation close to Emmie IOCG.
- The survey is also designed to identify possible extensions to the shallower Tapley Hill Fm shale which hosts Coda's sedimentary copper-cobalt mineralisation at Emmie Bluff.
- The four planned surveys across the Emmie IOCG and Elaine prospects will take approximately one month to complete, with rapid data turnaround anticipated and preliminary data expected prior to the end of the survey.

# **Operational Update**

- The Emmie Bluff Integrated Study covering Coda's three JORC 2012 Compliant Mineral Resources at the Elizabeth Creek Copper Project is in the final stages and remains on track for delivery within the current quarter.
- All front-end work for the Study has been completed with Coda awaiting only final reports for downstream processing options for copper-cobalt concentrates.

Coda Minerals Ltd ("Coda" or "the Company") (ASX: COD) is pleased to advise that an Ambient Noise Tomography (ANT) survey has commenced over the Emmie Bluff IOCG discovery and Emmie Bluff copper-cobalt deposits at its 100%-owned Elizabeth Creek Copper Project in South Australia, with placement of the initial geodes now well advanced.

The deployment of Fleet Space Technologies' "ExoSphere" ANT survey represents a pivotal new phase of exploration aimed at unlocking the broader potential of the Emmie Bluff Project and following up on the discovery of the Emmie IOCG copper-gold deposit in June 2021.

The survey is designed to provide a highly detailed sub-surface velocity map to assist in identifying structures that may host extensions of and/or thicker mineralised portions of the Emmie IOCG deposit.

While the Company has completed over 23,000m of diamond drilling at Emmie IOCG, the area covered by the drilling is laterally small, leaving vast areas of the anomaly untested by drilling and not yet covered by geophysical surveys capable of identifying mineralising structures.

The ANT survey will give Coda the ability to cover a much greater area at significantly lower cost than drilling, allowing it to refine and update the next stage of its exploration work programmes. In addition to assisting with exploration for IOCG-style mineralisation, the ANT survey is also expected to assist in the identification of any additional areas of Tapley Hill Fm shale, which is the host rock for the shallower copper-cobalt deposits that occur across its tenure.





Subject to time and progress, the survey will also be deployed across the Central Elaine Zone Area (see Figure 1 below), which hosts compelling evidence of IOCG mineralisation and remains highly prospective.

Commenting on the recent developments at Elizabeth Creek, Coda CEO Chris Stevens said:

"We are excited to be out at site exploring again at Elizabeth Creek and to have the opportunity to deploy this cutting-edge technology at Emmie IOCG, Emmie Bluff and the Central Elaine Zone.

"The massive advantage of the ExoSphere system is that we are able to receive real-time images from the field and react quickly to the information. This allows us to add resolution to certain areas and to really start to build up a better understanding of what is happening at depth.

"Since the discovery of Emmie IOCG in June 2021 we have undertaken a large-scale drill campaign resulting in multiple high-grade intercepts at depth but, so far, the thickness and scale consistent with a world-class IOCG discovery has eluded us. This next phase of work is designed to give us a much better understanding, not only about what is happening at depth in and around the Emmie IOCG itself, but also to a greater extent over the whole area including the AD8 and Con Ryan Prospects.

"Both Emmie IOCG and Emmie Bluff have demonstrated that we have discovered a vast copper-bearing system so we are very excited to see what this next phase of exploration work will unlock."

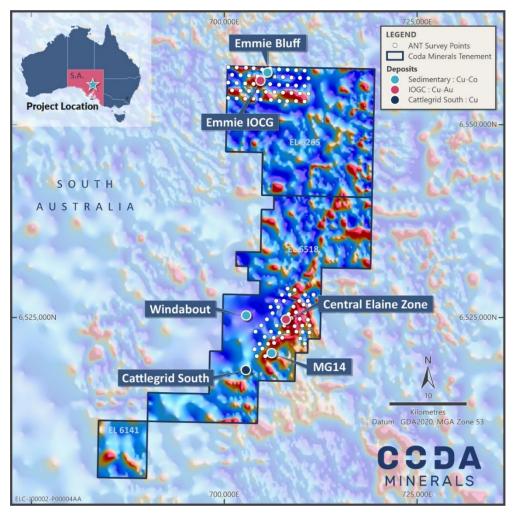


Figure 1: Map of Elizabeth Creek Tenure showing survey locations





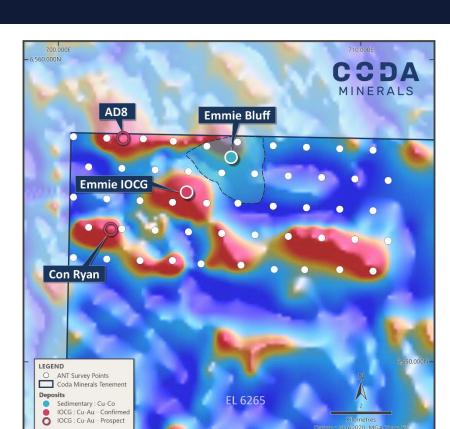


Figure 2: Detail of Emmie Bluff Survey Area Including Regional Prospects

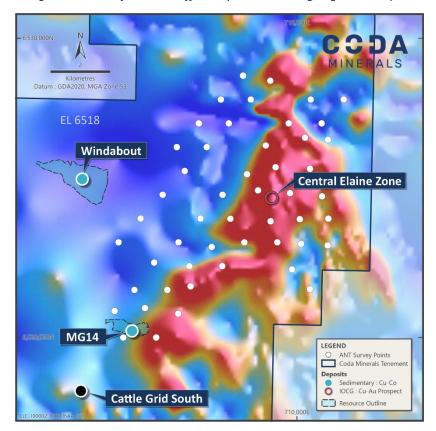


Figure 3: Detail of Central Elaine Zone Survey Area



Resource Outline



## About ExoSphere

ExoSphere is a real-time ANT passive seismic exploration technique that makes use of pervasive seismic noise from natural and anthropogenic sources to visualise a three-dimensional subsurface shear wave velocity model. ANT offers the advantages of covering a large area, is able to visualise below cover of more than 1000m and can indicate the depth of structures within the cover and basement rock. The initial survey is expected to cover an area of roughly 40 square kilometres across Emmie Bluff, Emmie IOCG and numerous other prospective density related anomalies in the immediate area.

The survey will produce an image of the paleotopographic surface, allowing for detailed 3D constrained forward modelling of magnetic and gravity data, as well as providing indications of velocity anomalies which may indicate the presence of material iron oxide deposition. Such an understanding of the geometries may provide a more detailed understanding of major horst and graben structures as well as potentially indicating the presence of any large-scale conduits not yet identified by drilling.

The survey is also expected to isolate in detail the extent and gross geometry of any Tapley Hill shale in the area, offering the potential to expand the shallower Zambian-style Cu-Co-Ag mineralisation at Coda's Emmie Bluff Mineral Resource.



Figure 2: Close up of Fleet Technologies Exosphere Geode







Figure 3: Deployment of Geode at Emmie Bluff

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# **About Coda Minerals**

**Coda Minerals Limited** (ASX: COD) is focused on the discovery and development of minerals that are leveraged to the global energy transformation through electrification and the adoption of renewable energy technologies.

Coda's flagship asset is the 100%-owned Elizabeth Creek Copper-Cobalt Project, located in the world-class Olympic Copper Province in the Eastern Gawler Craton, South Australia's most productive copper belt. Elizabeth Creek is centred 100km south of BHP's Olympic Dam copper-gold-uranium mine, 15km from its new Oak Dam West Project and 50km west of OZ Minerals' Carrapateena copper-gold project.

Coda consolidated 100% ownership of the Elizabeth Creek Copper Project after completing the acquisition of its former joint venture partner, Torrens Mining, in the first half of 2022.

In December 2021, Coda announced a maiden Indicated and Inferred Mineral Resource Estimate for the Emmie Bluff copper-cobalt deposit at Elizabeth Creek comprising 43Mt @ 1.3% copper, 470ppm cobalt, 11g/t silver and 0.15% zinc (1.84% CuEq) containing approximately 560kt copper, 20kt cobalt, 15.5Moz silver and 66kt zinc (800kt CuEq)¹. Importantly, 92% of the contained metal is classified in the higher confidence 'Indicated Resource' category and is available for use in mining studies.

Emmie Bluff is one of three known 'Zambian-style' copper-cobalt deposits at Elizabeth Creek, including JORC 2012 compliant Indicated Mineral Resources at the Windabout (18Mt @ 1.14% CuEq) and MG14 (1.8Mt @ 1.67% CuEq) deposits<sup>2</sup>. Collectively, the three resources at Elizabeth Creek now host a total of 1.1 million tonnes of contained copper equivalent<sup>1,2</sup>.

Coda has also discovered a significant IOCG system adjacent to and below the Emmie Bluff target, with initial deep diamond drilling in June 2021 intersecting 200m of intense IOCG alteration at the Emmie IOCG target, including approximately 50m of copper sulphide mineralisation<sup>3</sup>. Since then, Coda has drilled 21 holes into Emmie IOCG, with all but three returning significant widths of mineralisation, some over 3% copper and 0.5g/t gold<sup>4</sup>.

Coda has a dual strategy for success at Elizabeth Creek. Firstly, it is working towards a Scoping Study to determine the economic potential of the known sediment-hosted Mineral Resources on the tenure, while simultaneously undertaking exploration to further define and extend known Zambian-style copper-cobalt resources across multiple prospects.

Secondly, it is undertaking a substantial geophysics programme at the Emmie IOCG prospect to further understand the structures and extent of the geological model defined over the past year of drilling.

Coda also has a Farm-In and Joint Venture Agreement with Wilgus Investments Pty Ltd to acquire up to 80% ownership of the Cameron River Copper-Gold Project, located in the highly prospective Mount Isa Inlier in Queensland. The Project comprises 35km<sup>2</sup> of copper and gold exploration tenure spanning two Exploration Permits (EPMs 27042 and 27053).

Through Torrens Mining acquisition, Coda also owns exploration tenements in Victoria, New South Wales and Papua New Guinea.

<sup>&</sup>lt;sup>4</sup> 2022.09.18 – Assays from IOCG Drilling Confirm Target Areas for Follow Up, Competent Person: Mr Matthew Weber.



<sup>&</sup>lt;sup>1</sup> 2021.12.20 - Standout 43Mt Maiden Cu-Co Resource at Emmie Bluff, Competent Person: Dr Michael Cunningham.

<sup>&</sup>lt;sup>2</sup> 2020.10.26 - Confirmation Statements JORC, Competent Person: Tim Callaghan.

<sup>&</sup>lt;sup>3</sup> 2021.06.22 - <u>Thick Zone of IOCG Mineralisation Intersected at Emmie Bluff Deeps</u>, Competent Person: Mr Matthew Weber.



# Competent Persons' Statements and Confirmatory Statement - Mineral Resource Estimates

Information regarding the MG14 and Windabout Mineral Resources is extracted from the report entitled "Confirmation Statements JORC" created on 26<sup>th</sup> October 2020 and is available to view at <a href="https://www.codaminerals.com/wp-content/uploads/2020/10/20201026">https://www.codaminerals.com/wp-content/uploads/2020/10/20201026</a> Coda ASX-ANN Confirmation-Statements-JORC.pdf.

Information regarding the Company's MG14 and Windabout Mineral Resource Estimates is based on, and fairly represents, information and supporting documentation compiled by Tim Callaghan, who is self-employed. Mr Callaghan is a Member of the Australasian Institute of Mining and Metallurgy ("AusIMM"), and has a minimum of five years' experience which is relevant to the style of mineralisation and type of deposit under consideration and to 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' ("JORC Code"). Mr Callaghan has consented to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

Information regarding the Emmie Bluff Mineral Resource is extracted from the report entitled "Standout 43Mt Maiden Cu-Co Resource at Emmie Bluff" created on 20<sup>th</sup> December 2021 and is available to view at <a href="https://www.codaminerals.com/wp-content/uploads/2021/12/20211220">https://www.codaminerals.com/wp-content/uploads/2021/12/20211220</a> Coda ASX-ANN Standout-43Mt-Maiden-Cu-Co-Resource-at-Emmie-Bluff RELEASE.pdf

Information regarding the Company's Emmie Bluff Mineral Resource Estimates is based on, and fairly represents work done by Dr Michael Cunningham of Sonny Consulting Services Pty Ltd. Dr Cunningham is a Member of the Australasian Institute of Mining and Metallurgy and has sufficient relevant experience to the style of mineralisation and type of deposit under consideration and to the activities undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Joint Ore Reserves Committee (JORC) Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.

The Company 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 or Ore Reserves, that 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 been materially modified from the original market announcement.

### Statement Regarding Metal Equivalent Calculations

Metal Equivalent grades are quoted for one or more of the Emmie Bluff, Windabout and MG14 Mineral Resources, or for exploration results considered by the company to be related directly to one of these Mineral Resources, in this announcement.

### For the Emmie Bluff Mineral Resource:

The Emmie Bluff Mineral Resource is reported as 43Mt @ 1.3% Cu, 470 ppm Co, 11 g/t Ag and 0.15% Zn (1.84% Copper Equivalent (CuEq)) reported at a cut-off grade of 1% CuEq. The calculation of this metal equivalent is based on the following assumptions.

| Metal  | Coefficient | Forecast Price | Price Unit |  |
|--------|-------------|----------------|------------|--|
| Copper | 0.8         | \$7,000        | USD/Tonne  |  |
| Cobalt | 0.85        | \$55,000       | USD/Tonne  |  |
| Zinc   | 0.9         | \$2,100        | USD/Tonne  |  |
| Silver | 0.85        | \$18.50        | USD/Oz     |  |

Price assumptions used when calculating copper equivalent grades were based primarily on Consensus Economics forecasts of metals, except for Cobalt, which was sourced via communication with subject matter experts. Metallurgical assumptions used when calculating copper equivalent grades were based on a simple bulk float utilising rougher and minimal cleaner/scavenger circuits. The produced a reasonably consistent mean recovery across most metals of between approximately 83 and 94 percent. For simplicity, and to in part account for losses associated with less intensive cleaner floats and losses to the hydromet plant, these figures were rounded down to the nearest 5%. Application of these assumptions resulted in the following calculation of CuEq:

$$CuEq\% = Cu\% + 0.00068 \times Co\ ppm + 0.337 \times Zn\% + 90.3 \times \frac{Ag\ ppm}{10000}$$





#### For the Windabout and MG14 Mineral Resource:

The Windabout and MG14 Mineral Resource are reported at a cut-off grade of 0.5% CuEq as:

- Windabout: 17.67Mt @ 0.77% Cu, 492 ppm Co and 8 g/t Ag (1.41% CuEq)
- MG14: 1.83Mt @ 1.24% Cu, 334 ppm Co and 14 g/t Ag (1.84% CuEq)

The calculation of this metal equivalent is based on the following assumptions.

| Metal  | Mining<br>Recovery % | Dilution % | Recovery % | Payability % | Forecast Price | Price Unit |
|--------|----------------------|------------|------------|--------------|----------------|------------|
| Copper | 0.9                  | 0.05       | 0.6        | 0.7          | \$6,600        | USD/Tonne  |
| Cobalt | 0.9                  | 0.05       | 0.85       | 0.75         | \$55,000       | USD/Tonne  |

Price assumptions used when calculating copper equivalent grades were based on recent historical metal prices at the time of calculation (2018). Metallurgical assumptions are based on extensive metallurgical testwork undertaken on the two deposits to 2018 across various potential flowsheets involving both floatation and leaching. Ag analyses in the estimation and metallurgical testwork were considered insufficient at the time to include in the metal equivalent calculation.

Application of these assumptions resulted in the following calculation of CuEq:

 $CuEq\% = Cu\% + 0.0012 \times Co ppm$ 

It is the opinion of the company that both sets of prices used in the calculations are reasonable to conservative long-term forecasts for real dollar metal prices during the years most relevant to the deposits (approx. 2026-2030). It is the opinion of the company that all of the elements included in the metal equivalent calculations have a reasonable potential to be recovered and sold.

For full details of the Emmie Bluff Metal Equivalent calculation, please see "Standout 43Mt Maiden Cu-Co Resource at Emmie Bluff", released to the ASX on 20<sup>th</sup> December 2021 and available at <a href="https://www.codaminerals.com/wp-content/uploads/2021/12/20211220">https://www.codaminerals.com/wp-content/uploads/2021/12/20211220</a> Coda ASX-ANN Standout-43Mt-Maiden-Cu-Co-Resource-at-Emmie-Bluff RELEASE.pdf. For full details of the MG14/Windabout Metal Equivalent Calculation, please see "Confirmation of Exploration Target & Mineral Resource and Ore Reserve Statement", released to the ASX on 23<sup>rd</sup> October 2020 and available at <a href="https://www.codaminerals.com/wp-content/uploads/2020/10/20201026">https://www.codaminerals.com/wp-content/uploads/2020/10/20201026</a> Coda ASX-ANN Confirmation-Statements-JORC.pdf.

# **Forward Looking Statements**

This announcement contains 'forward-looking information' that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the Company's business strategy, plans, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, mineral reserves and resources, results of exploration and related expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'potential', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially different. Forward-looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance or achievements to be materially different from those expressed or implied by such forward-looking information.

