

**12 December 2023**

## **NEAR MINE EXPLORATION DRILLING UPDATE**

*Drilling intersected mineralisation 90 m south of the Endeavor silver zinc lead orebody*

### **HIGHLIGHTS**

- **Over 100m of mineralisation intersected in exploration drillhole at the Carpark (Endeavor South) anomaly**
- **Program successfully achieved goal of expanding the target zones in proximity to the Endeavor orebody.**

Polymetals Resources Ltd (ASX: **POL**) (**Polymetals** or the **Company**) announced the commencement of the first near-mine exploration reverse circulation (RC) drilling programme at Endeavor on 28<sup>th</sup> November<sup>1</sup>. To date, POL has completed 6 RC holes for 608 metres of drilling at Panda and one RC hole for 142 metres at the Carpark Anomaly (Endeavor South).

The drilling targeted two areas in proximity to the silver zinc lead rich Endeavor orebody. This drilling is significant as it continues the three-pronged advance of exploration targets<sup>2</sup>; namely, the in-mine, near-mine and regional areas of the mining leases and exploration licences.

The two targets tested were the Panda anomaly and the Carpark anomaly, located 500 m to the east, and 90 m to the south of Endeavor mineralisation, respectively. These targets are highly significant as they potentially outline two new lenses of mineralisation. The exploration search space in these anomalies is open and prospective. That is, mineralisation is shown to occur in an area that is only sparsely drilled leaving space for a sizeable body of mineralisation which has the potential to be progressively unveiled with further drilling.

The Panda anomaly is a zinc and lead rich oxidised outcropping body of mineralisation observed in shallow trenches recently delineated by Polymetals. Panda was drilled by 6 RC holes designed to delineate the grade and size of mineralisation mapped at surface. Drilling returned gossanous zones of mineralisation confirmed by elevated pXRF values; samples have been sent for analysis and assays are awaited.

<sup>1</sup> Refer ASX Announcement "Near-Mine Exploration Drilling to commence at Endeavor" dated 28/11/2023

<sup>2</sup> Refer ASX Announcement "Polymetals Defined Strategy and Growth Presentation" dated 31/10/2023

The Carpark anomaly (named because it exists directly below the employees' carpark inside the mine gate) is also just a short step from the main Endeavor orebody, this time towards the south and directly along strike. The area is sparsely drilled by historical operators and is defined by one hole completed in 1974 that is postulated to clip the zone to be targeted (refer to **Figure 4**). Polymetals drilled the Carpark anomaly with one RC hole which returned over 100 m interval of highly anomalous zinc and lead mineralisation, as determined by pXRF. Samples have been bagged and sent for analysis and assays are awaited.

**Executive Chairman Dave Sproule said;**

*"The results of this drilling programme show the highly prospective nature of the near-mine environment around the Ag-Zn-Pb rich Endeavor orebody. It is amazing how a different approach to exploration targeting can unveil new areas of potential despite the years of past operational activity. The exploration search space is definitely not closed and remains highly prospective. Polymetals is determined to:*

- 1. Restart mining operations and recoup the value as defined in the Mining Restart Study;*
- 2. Augment the mine feed that is defined in the Mine Restart Study by finding 'more high grade ore' through the application of a systematic exploration methodology to advance its near-mine, in-mine and regional targets;*

*The results of this exploration drilling only spurs our efforts in exploration."*

**PANDA PROSPECT**

Polymetals completed 608 m of reverse circulation drilling at the Panda prospect (**Figure 1**), a zinc and lead rich oxidised outcropping body of mineralisation observed in shallow trenches occurring 500 m to the east of the Endeavor orebody. Drilling intersected multiple discrete zones of ferricrete and silcrete which appear gossanous in places within a depleted oxidised siltstone. Initial pXRF readings have resulted in additional sampling to be analysed by a third-party laboratory. The drill hole to test continuity of the mineralisation intersected in the Sandfire drill hole (20CES001) did not adequately validate the data, however, the results indicate the potential for high grade mineralisation in the area. This drilling confirms the results of near surface trenching which defined coherent multielement geochemistry anomalism caused by the presence of oxidised lead and zinc carbonates.

Samples will be dispatched for analysis as soon as practicable and the results will be disclosed on receipt of the assays.



**Figure 1: Location Plan – Panda Drill Holes**

### **CARPARK ANOMALY**

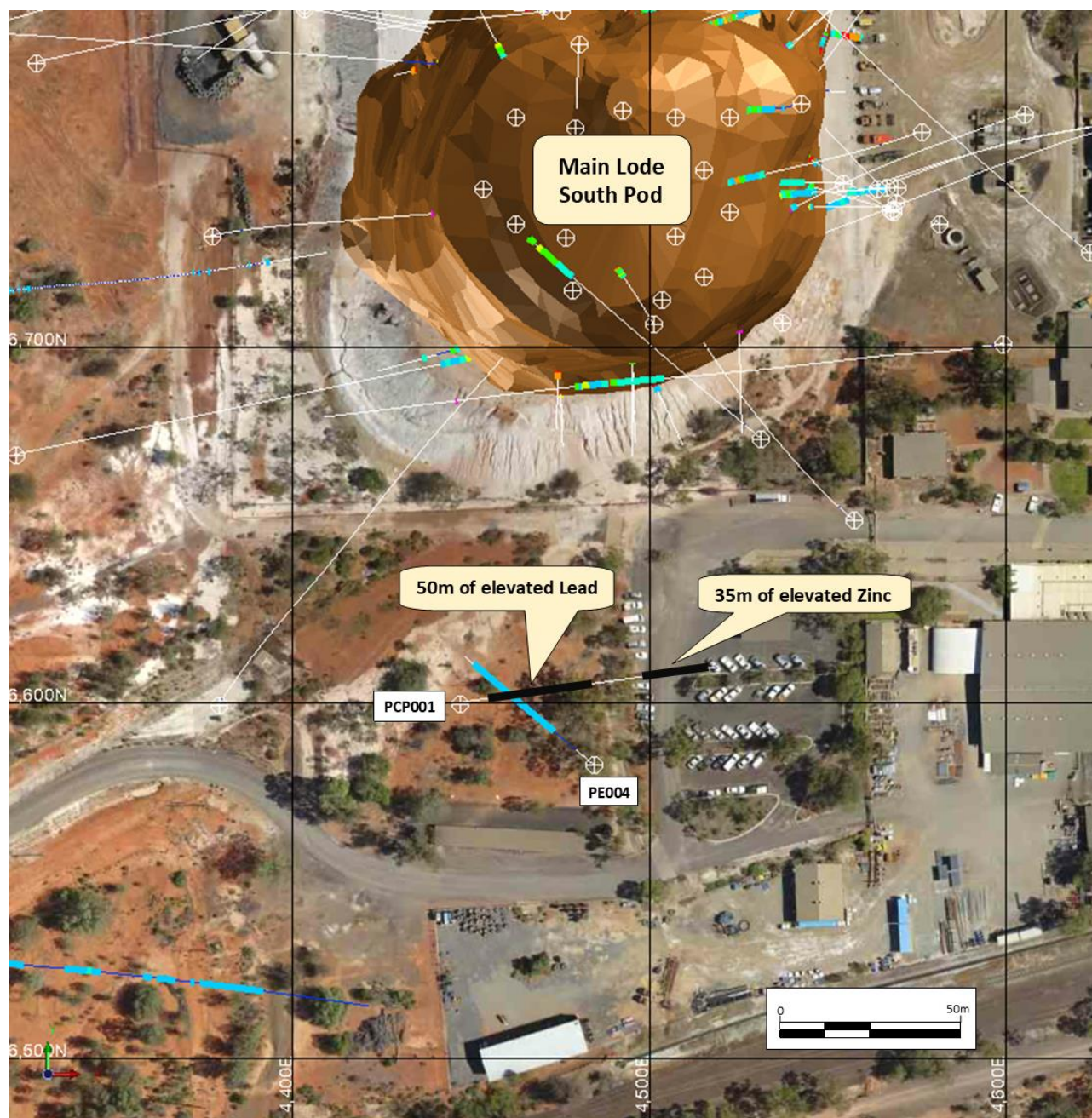
Polymetals completed one 142 m deep reverse circulation drillhole at the Carpark anomaly, a mineralised area to the south and along strike of the Endeavor orebody. Polymetals intersected a broad zone of mineralisation 90 m south of the main Endeavor ore body. The hole targeted an historical drill hole, (PE004) with anomalous lead mineralisation, drilled in 1974, the results of which were located in an old report and not included in the drilling database (**Figure 2**).

Initial pXRF analysis (see cautionary note page 3) has indicated strongly anomalous zinc and lead mineralisation over the +100m interval. The indicated anomalism in recent hole PCP001 appears to be much stronger than the historic drill hole PE004. The mineralisation appears to be of a similar tenor to that found above the North Lode (UML) drilled in February 2023. This result is considered to be significant as there is no drilling south of the Endeavor Main Lode between the surface and about 500 m depth.

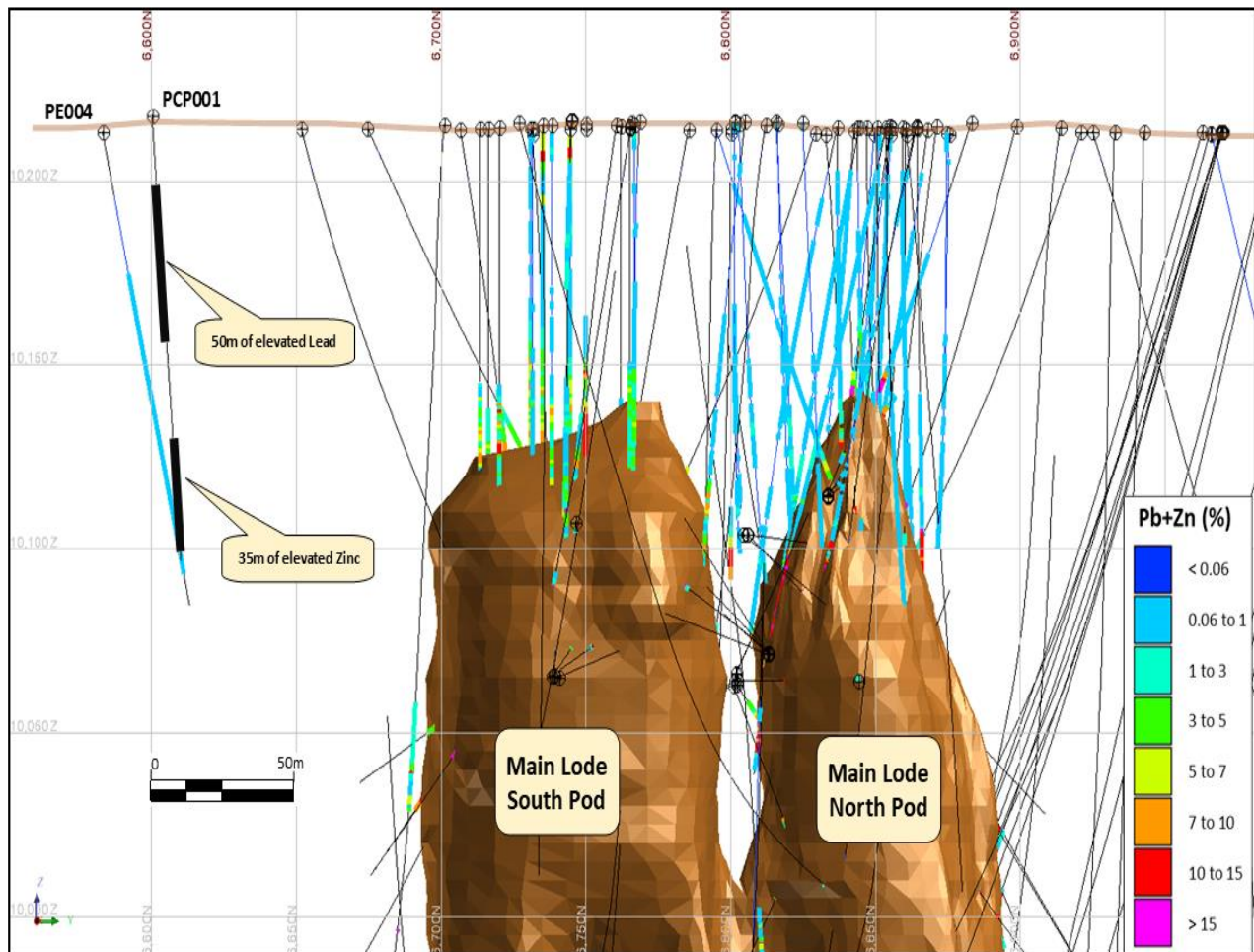


The proximity of this observed mineralisation in PCP001 to underground mine infrastructure (**Figure 3**) ranks the prospect as one of highest priority. It is expected that early in 2024, once assays have been finalised and interpreted, additional work will commence to test the down dip potential of this exciting near-mine target.

Samples will be dispatched for analysis as soon as practicable and the results will be disclosed on receipt of the assays. Polymetals will continue to maintain its continuous disclosure requirements updating the market with progress and material results as they come to hand.



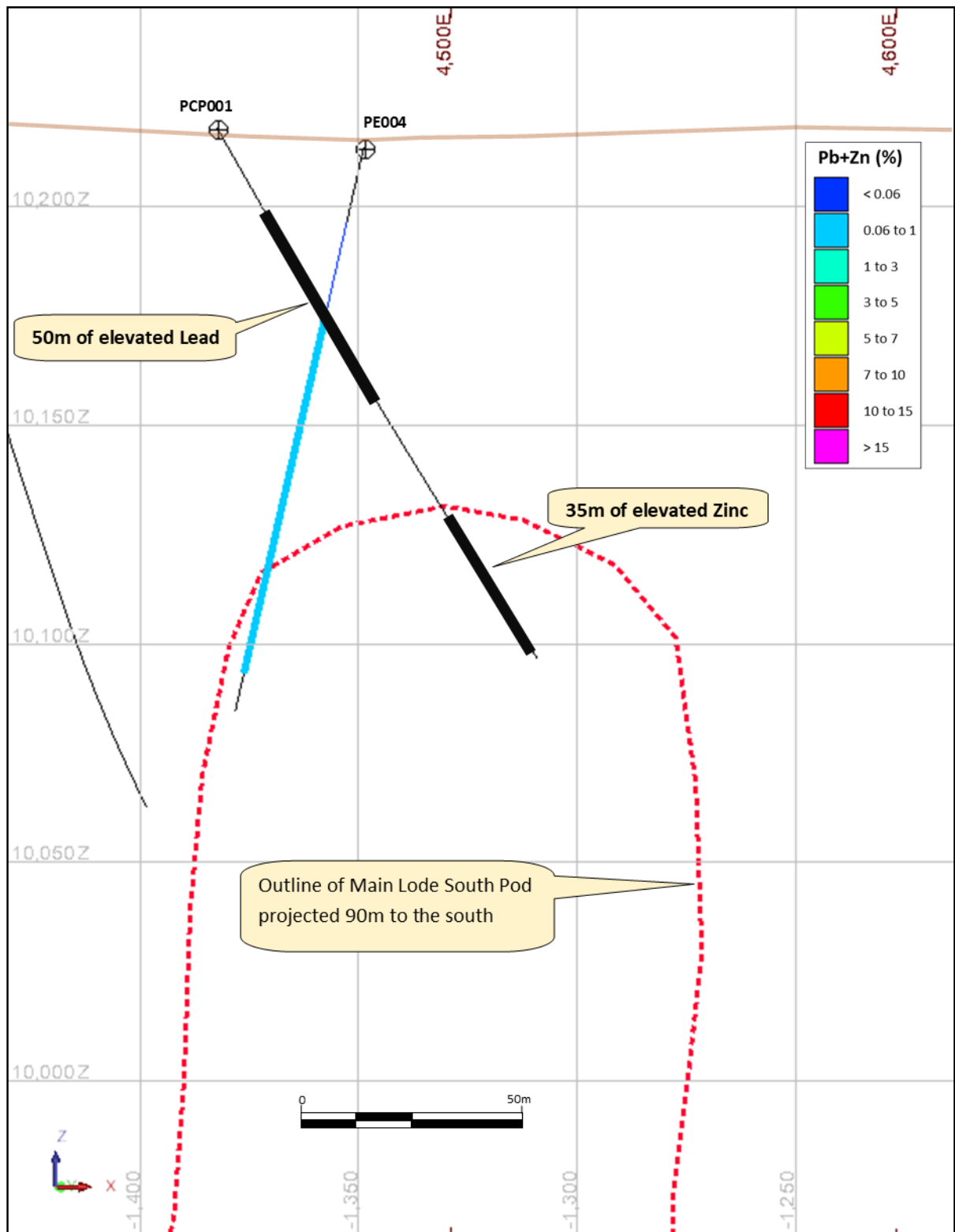
**Figure 2: Location Plan - Drill Hole PCP001**



**Figure 3: Long Section Looking West – Main Lode mineralisation and historic drill holes.**

#### Cautionary Note – pXRF Analysis of RC Chips

Reference in this announcement to pXRF analysis are of RC drill chips held within calico sample bags. Results of pXRF analyses are preliminary and semi-quantitative in nature and may not be representative of the entire sample interval. Laboratory assays are required for quantitative and representative estimates of zinc and lead metal concentrations. The RC samples will be assayed at 1m intervals with results expected in early 2024.



**Figure 4: Cross Section 6600mN**



**Table 1: Collar details PCP001 (Coordinates are local mine grid)**

Hole ID	Hole Type	Easting	Northing	RL	Dip	Depth	Azimuth
PCP001	RC	4446	6600	10218	-60	142m	81°

**This announcement was authorised for release by the Polymetals Resources Ltd Board.**

*For further information, please contact:*

**Linden Sproule**

Corporate Development

[linden.sproule@polymetals.com](mailto:linden.sproule@polymetals.com)**John Haley**

Chief Financial Officer / Company Secretary

[john.haley@polymetals.com](mailto:john.haley@polymetals.com)**ABOUT POLYMETALS**

Polymetals Resources Ltd (**ASX: POL**) is an Australian mining and exploration company with a project portfolio with significant potential for the discovery and development of both precious and base metal resources. With our cornerstone asset the Endeavor Silver-Zinc-Lead Mine, Polymetals is seeking to become a long term, consistent and profitable base and precious metal producer. Polymetals holds a strong exploration portfolio for organic growth, are development driven and continually measure strategic acquisition opportunities. POL is committed to developing genuine long-lasting relationships within our community, building strong relationships with investment partners, local stakeholders and providing our shareholders with capital growth and dividends. For more information visit [www.polymetals.com](http://www.polymetals.com)

**FORWARD LOOKING STATEMENT**

This announcement may contain “forward-looking statements” concerning Polymetals that are subject to risks and uncertainties. Generally, the words “will”, “may”, “should”, “continue”, “believes”, “expects”, “intends”, “anticipates” or similar expressions identify forward-looking statements. These forward-looking statements involve risks and uncertainties that could cause actual results to differ materially from those expressed in the forward-looking statements. Many of these risks and uncertainties relate to factors that are beyond the ability of Polymetals to control or estimate precisely, such as future market conditions, changes in regulatory environment and the behaviour of other market participants. Polymetals cannot give any assurance that such forward-looking statements will prove to have been correct. The reader is cautioned not to place undue reliance on these forward-looking statements. Polymetals assumes no obligation and does not undertake any obligation to update or revise publicly any of the forward-looking statements set out herein, whether as a result of new information, future events or otherwise, except to the extent legally required.

**COMPETENT PERSON STATEMENT**

The information supplied in this release that relates to exploration activities for the Endeavor Project is based on information compiled by Mr Troy Lowien, a Competent Person who is a Member of the Australian Institute of Mining and Metallurgy. Mr Lowien is an employee of Polymetals Resources Ltd and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken 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 Lowien consents to the inclusion of matters based on information in the form and context in which it appears.



**Figure 5: Photo of Drill Rig at collar of PCP001.**



## APPENDIX 1 – JORC Code (2012 Edition), Assessment and Reporting Criteria

### Section 1: Sampling Techniques and Data

Criteria	Explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<p>The sampling referred to in this release refers to 1 Reverse Circulation (RC) drill hole.</p> <p>Samples were all collected by a qualified geologist or under geological supervision. Sample was collected on one metre intervals via a cyclone with a cone splitter providing a 40kg and 2kg sample. The cyclone was cleaned at each rod change and when directed by the supervising geologist.</p> <p>The samples are considered to be representative of the rock being drilled.</p> <p>The nature and quality of the sampling was carried out in conformity with industry standard QAQC procedures.</p>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<p>Drilling consisted of Reverse Circulation (RC) drill holes, using a UDR1000 rig with a 350 psi/650 cfm compressor. An auxiliary air booster was also used. The drill string utilised standard 6m rods and a 5 ½ inch face sampling hammer.</p>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<p>Representative samples of the material drilled were collected from every metre drilled.</p> <p>The drilling method used was selected so as to maximise sample recovery. Holes were cased for a minimum of 12m from surface. Laboratory assays have not yet been received.</p>
<b>Logging</b>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<p>Drill chips were logged for lithology, mineralisation, weathering, alteration, colour and any other relevant characteristics.</p> <p>Logging was qualitative in nature. Small representative samples of chips are stored in chip trays and photographed. The entire length of the hole was logged.</p>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> </ul>	<p>Sample was collected on one metre intervals via a cyclone with a cone splitter providing a 40kg and 2kg sample. The cyclone was cleaned at each rod change and when directed by the supervising geologist.</p> <p>Bulk samples were placed in green plastic bags while sub samples were placed in calico bags.</p> <p>Filed duplicates were collected by spear method from green bulk sample bags. Certified Reference Material (CRM) standards and blanks were inserted into the sample stream at a rate of approximately 1 in 30.</p>

Criteria	Explanation	Commentary
	<ul style="list-style-type: none"> <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>	The sample size of 2kg is appropriate for the grain size of the material being sampled.
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<p>The 2kg one metre sample was tested at the rig during drilling using an Olympus Vanta portable XRF. The XRF is placed directly on the bag after cleaning the reading face, and a three beam XRF reading was taken (20 seconds per read).</p> <p>Anomalous samples (using the 2kg sample collected in a calico bag) were then re-tested using the Olympus Work station and portable XRF after the samples had been dried for at least 24 hours. This reading is 45 seconds, 30 seconds, and 30 seconds for the three beams respectively.</p> <p>25-50g pulps of anomalous samples were prepared at the on site preparation facility using a mortar and pestle and the sample re-read on the pXRF.</p> <p>The Olympus Vanta records the reading and the meta data for each reading and this is downloaded and checked before formatting and loading into the data set.</p> <p>The 2kg one metre samples have been sent to a third party laboratory for testing via aqua regia Au and multi-element ICP and also spectral testing</p>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <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>	<p>All drilling results were scrutinised by senior management of the company.</p> <p>The use of twinned holes is not relevant in this instance as the drill program has been undertaken to help refine targets for further investigation.</p> <p>All drilling data is accumulated initially in spreadsheets, and ultimately transferred to a master database for archiving.</p>
<b>Location of data points</b>	<ul style="list-style-type: none"> <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>	Drill collars were located on the ground using a GPS (+/-5m). The grid system used is the Endeavor Mine local grid.. The quality of the topographic control is considered to be adequate.
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <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>	As the program is preliminary in nature, insufficient data spacing and distribution has been obtained to establish the degree of geological and grade continuity appropriate for Mineral Resource estimation. No sample compositing has been applied.
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <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>	<p>Orientation of the drilling is considered to be appropriate for the target being tested and the purpose of the drilling.</p> <p>Mineralisation at Endeavor occurs in sub-vertical, cylindrical shaped bodies up to 100m wide.</p>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	Samples are stored on the Endeavor Mine site which is a fully fenced site and has controlled access. Samples were delivered to the external laboratory by a company geologist.
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	There has been no external audit or review of the sampling techniques or data completed at this time.

## Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<p>Endeavor Project Mineral tenements are listed below and are 100% owned by Cobar Operations Pty Ltd ML's 158, 159, 160, 161 and 930. EL's 8752, 5785 and 8583.</p> <p>All licences are in good standing.</p>
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<p>Previous exploration activities including drilling has been carried out on the site since the 1970's.</p>
<b>Geology</b>	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<p>Mineralisation at the Elura deposit is hosted by fine grained turbidite sequence of the Cobar Basin and comprises multiple sub-vertical elliptical shaped pipe-like pods that occur within the axial plane of an anticline and are surrounded by an envelope of sulphide stringer mineralisation, in turn surrounded by an envelope of siderite alteration extending for tens of metres away from the sulphide mineralisation.</p> <p>Around 150m below the base of the main mineralised pods/lodes, mineralisation is hosted within the western limb of a folded limestone unit, occurring in veins and fractures.</p> <p>Recent reviews favour a syngenetic formation model of an original stratiform deposit that was later emplaced by tectonic force into a favourable structural site during deformation.</p>
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<p>Representative sections (Figures 2 and 3) are included in this announcement. Tables showing collar coordinates, RL's, dip, azimuth, and hole depth are included in this announcement.</p>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical 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>	<p>No assay results have been reported in this announcement.</p>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <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 to this effect (eg 'down hole length, true width not known').</li> </ul>	<p>The geometry of the mineralisation (vertical pods) has been well defined from diamond drilling and underground development.</p> <p>The drill hole described in this announcement was designed to test for mineralisation by drilling at an oblique angle across the target area as seen in Figure 3 of this announcement.</p>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<p>Refer Figures 1, 2 and 3 within this announcement.</p>



Criteria	JORC Code explanation	Commentary
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	The accompanying document is considered to represent a balanced report.
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	There is no other exploration data which is considered material to the results reported in the announcement.
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (eg 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>	Further drilling is required to test below the intercept described in this announcement.