THOR

4 November 2022

#### **THOR MINING PLC**

Registered Numbers: United Kingdom 05276 414 Australia 121 117 673

Registered Office: 58 Galway Avenue MARLESTON, SA, 5035 Australia

Ph: +61 8 7324 1935

Email: corporate@thormining.com

Website: www.thormining.com

Twitter @ThorMining

Enquiries: Nicole Galloway Warland Managing Director Thor Mining PLC +61 8 7324 1935

Nominated Advisor Antonio Bossi WH Ireland Ltd +44 (0) 20 7220 1666

AIM & ASX Listings: Shares: THR

OTCQB Listing Shares: THORF

Directors: Nicole Galloway Warland Mark McGeough Alastair Clayton

### **Key Projects:**

Gold

Ragged Range Pilbara WA

- Copper Alford East SA
- Uranium / Vanadium Colorado / Utah USA
- Tungsten

Company Announcements Office ASX Securities Limited, 20, Bridge Street, Sydney, N.S.W. 2000

## High-grade gold intersected at Kelly's Ridge Ragged Range, WA 4m @ 12.2g/t Au from 194m in hole 22RRC0052 Awaiting further assays

The directors of Thor Mining Plc ("Thor") (AIM, ASX: THR, OTCQB: THORF) are pleased to provide initial drill results from Kelly's Ridge Prospect, Ragged Range, located in the Eastern Pilbara, Western Australia.

### **Project highlights:**

- Drilling returns high-grade gold from the silicified altered contact along Kelly's Ridge.
   Previous rock chip sampling at surface reported up to 15g/t Au and 535g/t Ag. Historical drilling reported 1.5m @ 22.97 g/t Au below these rock chips and four holes were designed to intersect this anomalous zone at depth.
- Best intercept to date of 4m @ 12.2g/t Au from 194m (22RRC0052).
- Only selected gold results received to date. Expecting all gold and multi-element assay data over the coming weeks.
- This first round of gold-only assays come from a few selected intervals in the first four holes of the 10-hole program, showing strong alteration as seen in the chip tray photo below.



**Photo 1**: RC Chips from 22DDRC052 at Kelly's Ridge Prospect, Ragged Range

### Nicole Galloway Warland, Managing Director of Thor Mining, commented:

"We are delighted to share these high-grade intercepts from Kelly's Ridge. The intercept of 4m @ 12.2g/t Au is an exceptional result under Kelly's Ridge, especially given the depth of the 194m downhole, showing excellent grade continuity from the surface. This confirms the potential of the site as indicated by historical drilling. Furthermore, with more drilling results to come, we are looking forward to gaining further understanding of the project. We anticipate more positive news to be shared with the market in due course."



The Ragged Range Project, located in the prospective Eastern Pilbara Craton, Western Australia, is 100% owned by Thor Mining (covering E46/1190, E46/1262, E46/1355, E46/1340 and E46/1393 - Figure 2 and Figure 3).

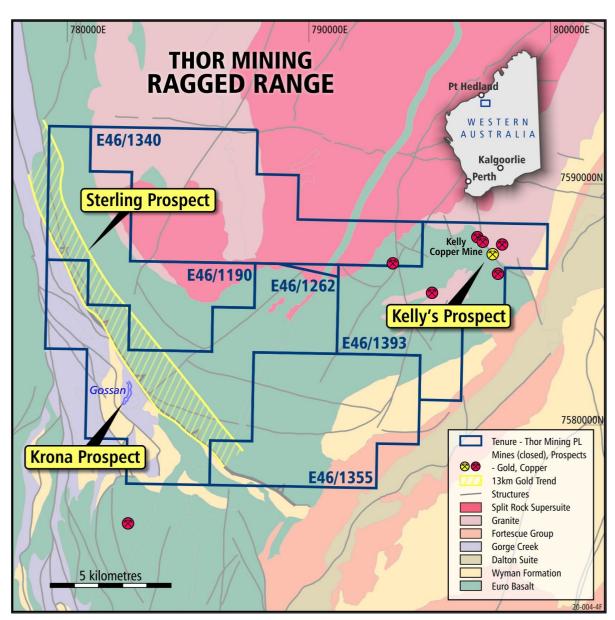


Figure 1: Location Plan



### **Kelly's Prospect**

The first results of gold-only assays from a small portion of the Kelly's Ridge drilling have been received from the recently completed RC drilling program at Kelly's Prospect, Figure 1 and Figure 2 (ASX/AIM: THR 26 October 2022).

Drilling at Kelly's Ridge was multi-purposed: it was designed to test below the high-grade rock chips returning up to 15g/t Au and 535g/t Ag along the 1km silicified ridge at the contact between the Boobina Porphyry and Euro Basalt; as well as testing below and along strike of the historic drillhole (DDHK2¹), that intersected 1.5m @ 22.97g/t gold located at the porphyry-basalt contact (Figure 3).

Gold-only results (awaiting multi-element results) from sections of the first four drillholes confirmed gold mineralisation associated with silicification and sericite-sulphide alteration at the contact between the Boobina Porphyry and the Euro Basalt (Figure 2, 3 and 4, Table A).

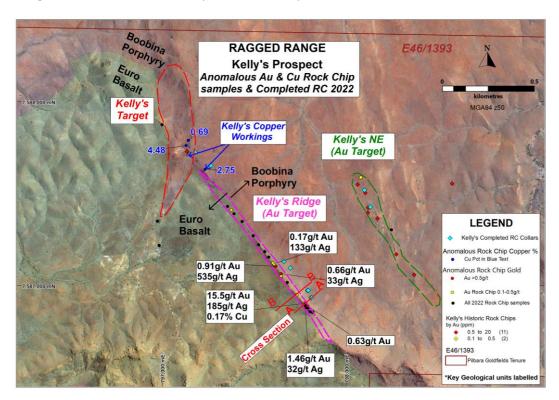
Significant results received to date include (greater than 0.8 g/t Au):

- 4m @ 12.2g/t Au from 194m (22RRC052)
- 1m @ 0.91 g/t Au (repeat 1.2g/t Au) from 40m (22RRC049)

(Refer to Table A for Collar information)

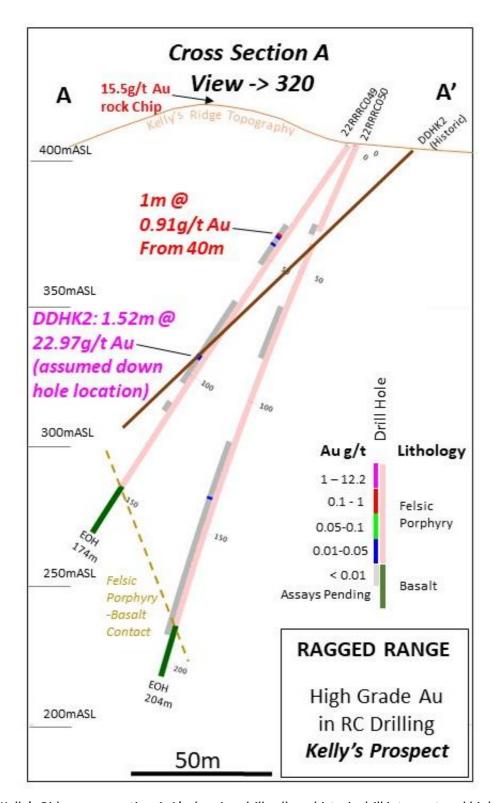
This small reconnaissance program included six holes along Kelly's Ridge, two below the historic Kelly's copper mine and two at Kelly's NE gold target.

Results for all gold and multielement assay data are anticipated over the next few weeks.



**Figure 2:** Kelly's Prospect, highlighting drill collars and gold in rock chips.





**Figure 3:** Kelly's Ridge cross section A-A', showing drill collars, historic drill intercept and high-grade rock chip-only a small portion of assay results received to date



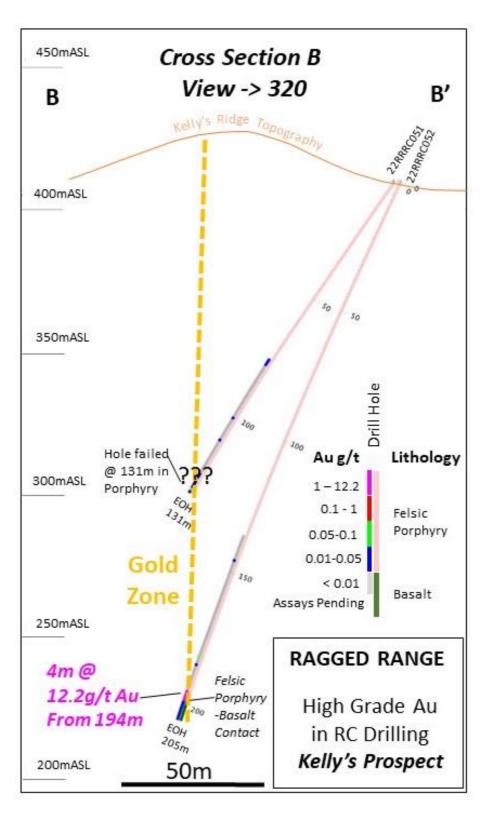


Figure 4: Kelly's Ridge cross section B-B' showing high grade gold intercept at contact

Table A: Kelly's Prospect Drill Collar Information (MGA94 Z50)

Hole ID	Easting	Northing	RL	EOH	Dip	Azi_TN	Comments
22RRRC049	797810	7586934	409	174	-55	230	Partial results – gold only
22RRRC050	797813	7586935	409	204	-65	227	Partial results - gold only
22RRRC051	797791	7586973	410	131	-55	230	Failed hole at 131m (short of target)
22RRRC052	797793	7586974	410	205	-65	231	Partial results
22RRRC053	797697	7587096	408	162	-54	231	Awaiting results
22RRRC054	797662	7587132	407	174	-55	230	Awaiting results
22RRRC055	798131	7587427	405	70	-55	253	Awaiting results
22RRRC056	798100	7587520	402	72	-55	250	Awaiting results
22RRRC057	797265	7587652	403	174	-55	215	Awaiting results
22RRRC058	797180	7587725	403	204	-55	270	Awaiting results

#### **Next Steps**

The following activities and results at Ragged Range are anticipated over the coming weeks:

- 1. Report of full assay results from the Kelly's drilling program.
- 2. Report of Platinum Group Elements (PGE) results from the Krona Nickel drillhole 22RRC045 associated with the 66m @ 0.2% Ni from 81m (ASX/AIM: THR 20 September 2022).
- 3. Continue regional exploration, including reconnaissance sampling over ground in the northern portion of tenure for prospective lithium-caesium-tantalum enriched (LCT) pegmatites.

### **References:**

1. DDHk2, drilled by Hawkstone 1969, Open File Annual Report

This announcement is authorised for release to the market by the Board of Directors.

For further information, please contact:

#### **THOR MINING PLC**

**Nicole Galloway Warland**, Managing Director +61 8 7324 1935 nicole@thormining.com

### **Competent Persons Report**

The information in this report that relates to exploration results is based on information compiled by Nicole Galloway Warland, who holds a BSc Applied geology (HONS) and who is a Member of The Australian Institute of Geoscientists. Ms Galloway Warland is an employee of Thor Mining PLC. She has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which she is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for



#### 4 November 2022

Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Nicole Galloway Warland consents to the inclusion in the report of the matters based on her information in the form and context in which it appears.

Updates on the Company's activities are regularly posted on Thor's website <a href="www.thormining.com">www.thormining.com</a>, which includes a facility to register to receive these updates by email, and on the Company's twitter page <a href="@ThorMining.">@ThorMining.</a>

#### **About Thor Mining PLC**

Thor Mining PLC (AIM, ASX: THR; OTCQB: THORF) is a diversified resource company quoted on the AIM Market of the London Stock Exchange, ASX in Australia and OTCQB Market in the United States.

The Company is advancing its diversified portfolio of precious, base, energy and strategic metal projects across USA and Australia. Its focus is on progressing its copper, gold, uranium and vanadium projects, while seeking investment/JV opportunities to develop its tungsten assets.

Thor owns 100% of the Ragged Range Project, comprising 92 km<sup>2</sup> of exploration licences with highly encouraging early stage gold and nickel results in the Pilbara region of Western Australia.

At Alford East in South Australia, Thor is earning an 80% interest in copper deposits considered amenable to extraction via In Situ Recovery techniques (ISR). In January 2021, Thor announced an Inferred Mineral Resource Estimate of 177,000 tonnes contained copper & 71,000 oz gold<sup>1</sup>.

Thor also holds a 30% interest in Australian copper development company EnviroCopper Limited, which in turn holds rights to earn up to a 75% interest in the mineral rights and claims over the resource on the portion of the historic Kapunda copper mine and the Alford West copper project, both situated in South Australia, and both considered amenable to recovery by way of ISR.<sup>23</sup>

Thor holds 100% interest in two private companies with mineral claims in the US states of Colorado and Utah with historical high-grade uranium and vanadium drilling and production results.

Thor holds 100% of the advanced Molyhil tungsten project, including measured, indicated and inferred resources<sup>4</sup>, in the Northern Territory of Australia, which was awarded Major Project Status by the Northern Territory government in July 2020.

Adjacent to Molyhil, at Bonya, Thor holds a 40% interest in deposits of tungsten, copper, and vanadium, including Inferred resource estimates for the Bonya copper deposit, and the White Violet and Samarkand tungsten deposits. <sup>5</sup>

### **Notes**

- <sup>1</sup> <u>www.thormining.com/sites/thormining/media/pdf/asx-announcements/20210127-maiden-copper.gold-estimate-alford-east-sa.pdf</u>
- <sup>2</sup> <u>www.thormining.com/sites/thormining/media/pdf/asx-announcements/20172018/20180222-clarification-kapunda-copper-resource-estimate.pdf</u>
- <sup>3</sup> <u>www.thormining.com/sites/thormining/media/aim-report/20190815-initial-copper-resource-estimate---moonta-project--rns---london-stock-exchange.pdf</u>
- $^4$  <u>www.thormining.com/sites/thormining/media/pdf/asx-announcements/20210408-molyhil-mineral-resource-estimate-updated.pdf</u>
- <sup>5</sup> <u>www.thormining.com/sites/thormining/media/pdf/asx-announcements/20200129-mineral-resource-estimates---bonya-tungsten--copper.pdf</u>



# 1 JORC Code, 2012 Edition - Table 1

## **Section 1 Sampling Techniques and Data**

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <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.</li> <li>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>	Reverse circulation drill samples were collected utilising a PVC sampling spear on the drill cutting piles to collect a 4m composite sample weighing approximately 3kg. Equal portions were taken from each pile to ensure representative samples and every metre was sampled. In addition, 1m samples were collected directly off the cyclone (1/8 split), which can be assayed as required to replace the 4m composite sample results. In zones of visual interest during drilling, these 1m splits were submitted for analysis instead of the 3m composites.
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).	Reverse circulation drilling (5 1/4 inch diameter)
Drill sample 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>	Sample recovery was good. Each drill cutting pile size is logged and any deviation from expected is raised with the driller, and if undersize, to check for blockages. No sample biases are expected, and no relationship is known to exist between sample recovery and grade.
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>	All chip samples are qualitatively geologically logged (lithology, structure, alteration, veining, mineralisation, weathering, colour and other features). No mineral resource estimation, mining studies or metallurgical studies have been conducted at this stage, but samples have been logged in sufficient detail to use for this



readings are taken on -2mm sieved samples on every drill metre, using an XTL5 Niton with a 40 second reading time. Instrument is calibrated at start of each day, along with QAQC

## 4 November 2022

		function.
Sub- sampling techniques and sample 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 sub-sampling 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>	Drill samples were taken dry with a PVC spear as described in "Sampling Techniques" above. The sample sizes are as per industry standard for RC drilling.  Sampling is carried out using standard protocols and QAQC procedures as per industry practice.
		All samples were sent to Bureau Veritas Laboratories in, which is an ISO 9001 accredited laboratory. Sample preparation includes sorting and drying, followed by LM5 pulverising (PR303).
Quality of assay data and laboratory 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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	The assay method is considered 'industry standard' and appropriate for exploration.  Drill samples were assayed at Bureau Veritas Laboratories in by lead collection fire assay with a 40g charge and AAS finish for gold with a detection limit of 0.01ppm (FA001)  Internal certified laboratory QAQC was undertaken including check samples, duplicates, blanks and internal standards  Handheld pXRF readings



## 4 November 2022

		of 1 standard and 1 blank. External instrument calibration completed annually.  All drill samples are measured for magnetic susceptibility at 1m intervals using a hand-held magnetic susceptibility meter.
of sampling	<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>	All significant intersections have been verified by a company geologist and alternative company geologist.  There are no twinned drillholes.  All drilling data is collected in a series of templates in excel including geological logging, sample information, collar and survey information.  All data is digitally recorded in the company's electronic database, managed by external database company utilising Datashed5 software.  No adjustments have been made to the assay data.
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>	Drill collars were surveyed using a handheld Garmin 62s GPS with an accuracy of +/-3m. Grid system is MGA94 zone 50 (GDA). Drill rig alignment at the collar was conducted using a north seeking gyro. Topographic control using the GPS is suitable for early- stage exploration.
Data spacing and 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>	Data spacing for preliminary exploration is deemed sufficient to test geochemical anomalies and mapped structural features. No sample compositing of data was conducted. Sufficiently anomalous assays and any other zones of interest will be assayed in more detail using the 1m samples collected off the cyclone.



## 4 November 2022

Orientation of data in relation to geological 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>	Orientational bias is not applicable to RC drilling at this stage but samples and drill lines were orientated approximately perpendicular to the assumed strike of gold mineralisation.
Sample security	The measures taken to ensure sample security.	All samples taken from Newman to Bureau Veritas, via registered express freight company. Sample Security levels are considered appropriate for RC Drilling.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	None undertaken. Thor's sampling procedure conforms to industry standard practice and each assay program is reviewed internally for any discrepancies.

## **☐** Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure 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>	Exploration results are reported on E46/1393 in Western Australia held 100% by Pilbara Goldfields Pty Ltd, Thor Mining PLC.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Sporadic surface geochemistry over tenure carried out by Great Southern Mines up to 1997. CRAE explored are in 1994. 1966 – 1974 – the area was explored by Conwest, Cominco and Hawkstone drilling 2 holes DDHK1 and DDHK2 with a copper focus. Keely Copper Mine was worked between 1955 – 1970 intermittently.
Geology	Deposit type, geological setting and style of mineralisation.	Yet to be determined



## 4 November 2022

Drill hole 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>	Tables, plans and sections summarising significant drill results are included in the report
Data aggregation methods	<ul> <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>assumptions used for any reporting of metal equivalent</li> <li>The values should be clearly stated.</li> </ul>	All aggregate drill intercepts are length weighted and there was no internal dilution incorporated. No metal equivalents have been reported.
Relationship between mineralisation widths and intercept 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 to this effect (eg 'down hole length, true width not known').</li> </ul>	All results are assumed to be true width but is not definitively known at this stage.
Diagrams	<ul> <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>	Appropriate maps and sections are included in the report.
Balanced reporting	<ul> <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 to avoid misleading reporting of Exploration Results.</li> </ul>	All results have been reported
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.	No meaningful or material information has been omitted from this release.



### 4 November 2022

Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-</li> </ul>	It is ar follow
	out drilling).	recon

 Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. It is anticipated that follow up and reconnaissance geochemistry (rockchip, soil & stream) and drilling will be undertaken over tenure, including Sterling and Kelly's prospects.