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#### THOR MINING PLC

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AIM & ASX Listings: Shares: THR OTCQB Listing Shares: THORF

Directors: Nicole Galloway Warland Alastair Clayton Mark McGeough

#### Key Projects:

- Uranium / Vanadium Colorado / Utah USA
- Gold Ragged Range Pilbara WA
- Copper Alford East SA

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

### Ragged Range Project, WA High-grade Copper and Gold confirmed at Kelly's NE Prospect

The directors of Thor Mining Plc ("Thor") (AIM, ASX: THR, OTCQB: THORF) are pleased to provide an exploration update on rock chip sampling at the Kelly's NE Prospect at the Company's 100% owned Ragged Range Project, located in Eastern Pilbara, Western Australia.

### **Project highlights:**

- At the Kelly's NE Prospect, rock chip sampling has identified high-grade gold (up to 7.2g/t Au) and copper (13.6% Cu) along north-south trending structures, similar to the Kelly's Ridge area (Figure 1).
- Highest-grade rock chips include:
  - 7.2g/t Au, 11.4% Cu, 102g/t Ag (R00148)
  - 2.6 g/t Au, 13.6 % Cu, 123g/t Ag (R00147)
  - 4.1g/t Au, 0.63 % Cu, 19.2g/t Ag (R00145)
  - 1.0g/t Au, 4.65% Cu, 67.8 g/t Ag (R00146)
- Geological mapping and geochemical sampling will continue over the project area, as the Company validates its structural and mineralising geological models.
- Remaining Reverse Circulation "RC" drilling results pending, including two holes that targeted this rock chip area.



Photo 1: Rock chip R00147: Malachite & azurite in quartz breccia - 2.6g/t Au, 13.6% Cu & 123g/t Ag Nicole Galloway Warland, Managing Director of Thor Mining, commented:

"The Kelly's NE area was defined in recent airborne magnetics and a compilation of previous exploration work. Despite significant soil anomalies being defined in the area, no drilling has been undertaken at the prospect. Rock chip sampling has now confirmed highgrade copper with significant gold and silver. I am looking forward to further exciting results being returned at this prospect."





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### Sampling Program

In parallel with the recently completed RC drilling at the Kelly's Prospect (ASX/AIM: THR 26 October 2022), nine rock chip samples were collected across the Kelly's NE Prospect area (Figure 1 and 2, Table A).

Thor's sampling program targeted surface copper mineralisation (malachite) associated with northsouth trending quartz breccia veins with limonite-jarosite alteration after sulphides (Photo 1). Highgrade gold (up to **7.2 g/t**), copper (up to **13.6**% Cu) and silver (up to **124g/t**), with anomalous lead (Pb) and zinc (Zn) have been identified ((Table A).

These recent rock chip samples demonstrating gold and copper mineralisation +Ag-Pb-Zn indicate a very different style of mineralisation to the Archaean Lode gold, over at the Sterling Prospect. Continuation of sampling and mapping will continue over the area.



Photo 2: Rock chip samples R00147 (left) and R00148 (right)



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Table A: Rock Chip Samples

Project - GDA94 Zone 50

SAMPLE	Northing	Easting	Au	Cu	Ag	Pb	Zn
DESCRIPTION			g/t	%	g/t	ppm <sup>1</sup>	ppm
R00145	7587513	798090	4.1	0.63	19.2	1100	44
R00146	7587511	798091	1.0	4.65	67.8	283	172
R00147	7587424	798124	2.6	13.6	123	1060	766
R00148	7587388	798115	7.2	11.4	102	585	154
R00149	7587230	798265	0.0	0.02	40	635	74
R00150	7587555	798573	0.0	0.10	1	9	206
R00151	7587681	798375	0.0	0.13	1.2	93	86
R00152	7585351	795071	0.1	0.13	1	4	146
R00153	7585424	795096	0.0	0.02	1	42	250

<sup>1</sup> 1ppm = 0.0001%

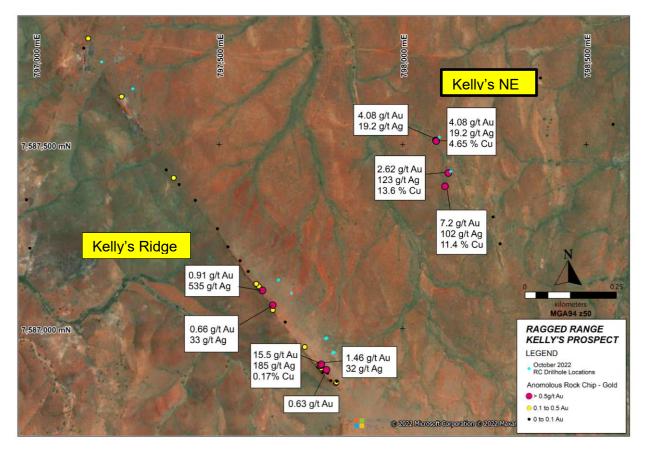


Figure 1: Sample location map.

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#### **Next Steps:**

- Await final Kelly's RC drilling assay results
- Continue to review and model data over the Kelly's area
- Continue reconnaissance sampling over ground in the northern portion of tenure for prospective lithium-caesium-tantalum enriched (LCT) pegmatites.

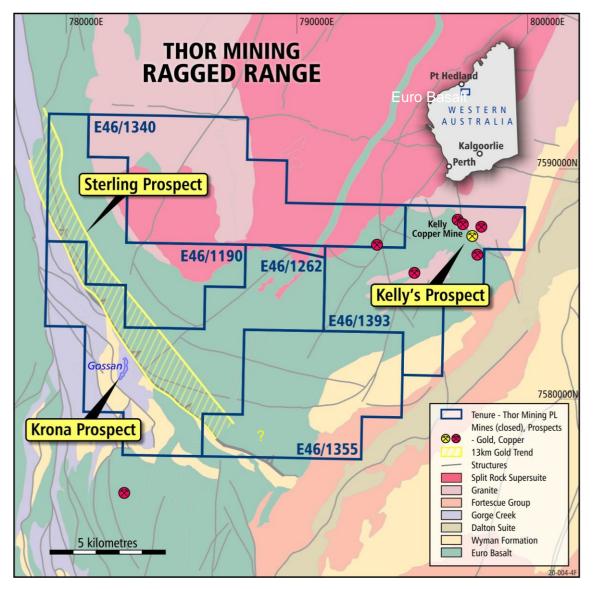


Figure 2: Ragged Range Tenement Location Map showings priority prospects.

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).





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

For further information, please contact: **THOR MINING PLC** 

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#### **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 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 <u>www.thormining.com</u>, which includes a facility to register to receive these updates by email, and on the Company's twitter page @ThorMining.

#### **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.





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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. Thor executed a \$8m Farm-in and Funding Agreement with Investigator Resources Limited (ASX: IVR) to accelerate exploration at the Molyhil Project on 24<sup>th</sup> November 2022.<sup>6</sup>

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> Thor's interest in the Bonya tenement EL29701 is planned to be divested as part of the Farm-in and Funding agreement with Investigator Resources Limited.<sup>6</sup>

<u>Notes</u>

<sup>1</sup> <u>www.thormining.com/sites/thormining/media/pdf/asx-announcements/20210127-maiden-copper.gold-</u> <u>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-</u> <u>project---rns---london-stock-exchange.pdf</u>

<sup>4</sup><u>www.thormining.com/sites/thormining/media/pdf/asx-announcements/20210408-molyhil-mineral-resource-</u> <u>estimate-updated.pdf</u>

<sup>5</sup> <u>www.thormining.com/sites/thormining/media/pdf/asx-announcements/20200129-mineral-resource-</u> <u>estimates---bonya-tungsten--copper.pdf</u>

<sup>6</sup> https://thormining.com/wp-content/uploads/2022/11/20221124-8M-Farm-in-Funding-Agreement.pdf



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## 1 JORC Code, 2012 Edition – Table 1 report template

### 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>	Rock chip sampling was based on geological outcrops, with analysis for Au by 25g fire assay FA001 and multi-element by MA101/2 four acid digest.
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).	Not applicable – no drilling reported
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>	Not applicable – no drilling 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 logging was undertaken. Lithological description recorded for all samples collected
Sub- sampling techniques	<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</li> </ul>	Samples were screened in the field as described in "Sampling Techniques" above. The sample sizes are as per industry standard for stream



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Criteria	JORC Code explanation	Commentary
and sample preparation	<ul> <li>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>	sediment geochemistry. Field duplicates and blank samples were submitted for assay with the other samples.
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 proposed assay method is appropriate for preliminary exploration.
Verification of sampling 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>	Data is validated and hosted in Maxgeo database.
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>	Hand held GPS – MGA94 zone 50 (GDA)
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>	Not applicable – no resource is being reported
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 rockchip sampling at this stage
Sample security	The measures taken to ensure sample security.	Geochemistry samples were trucked back from Nullagine to the Bureau Veritas Adelaide, SA



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			Sample Security levels are considered appropriate for preliminary surface geochemistry assessment.
Audits or reviews	•	The results of any audits or reviews of sampling techniques and data.	None undertaken

### **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	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	Sporadic surface geochemistry over tenure carried out by Great Southern Mines up to 1997.
Geology	• Deposit type, geological setting and style of mineralisation.	Yet to be determined
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>	No drilling has been undertaken or reported. Sample locations listed in Table A and Figure 1





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> </ul>	Only rock chip assays have been reported. There has been no data aggregation.
	<ul> <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> </ul>	
Relationship between mineralisation widths and intercept lengths	<ul> <li>The values should be clearly stated.</li> <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>	No drilling has been undertaken or reported
Diagrams	• 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.	A sample location plan including current 1:100k scale geology has been provided
Balanced reporting	• Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	All results have been reported
Other substantive exploration data	<ul> <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>	All data has been reported
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale stepout 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>	It is anticipated that follow up and reconnaissance geochemistry (rockchip, soil & stream) and geological mapping will be undertaken over tenure, including Sterling and Kelly's prospects. With follow up drilling