Thor Mining PLC

("Thor" or the "Company")

Off-hole Electromagnetic Conductor identified beneath Nickel Gossan

The directors of Thor Mining Plc ("Thor") (AIM, ASX: THR, OTCQB: THORF) are pleased to announce that anomalous nickel assays results from RC drilling have been returned and that an off-hole conductive anomaly has been identified from a subsequent down-hole electromagnetic geophysics survey at the Krona Prospect, within the Company's 100% owned Ragged Range Project, located in the Eastern Pilbara, Western Australia.

Project highlights:

- The shallow conductor, identified from the recent high-powered Fixed Loop Electromagnetics (FLEM) ground geophysics survey beneath the nickel gossan at the Krona Prospect, was drill tested with one RC drill hole, returning:
 - o 22RRRC045: 66m @ 0.19% nickel from 81m
- The drill hole intersected the edge of the modelled FLEM conductor.
- A down-hole electromagnetic (DHEM) geophysics survey was completed and revealed an off-hole conductor consistent with sulphides and warrants drill testing to validate.
- The nickel gossan is located at the basal contact of the Dalton Suite ultramafic unit (altered Archean Komatiite) in the classic location for nickel-copper sulphide mineralisation.



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

"I am encouraged that the down-hole geophysics survey at the Krona Prospect, Ragged Range has identified an off-hole electromagnetic conductor, and that the target is genuinely anomalous for nickel with assay values above background lithological values. This result warrants further drill testing to confirm this understanding.

"We are currently designing a drilling program at the Kelly's Prospect following up the high-grade gold in rock chips."

Next Steps

- Samples have been submitted for assay of Platinum Group Elements (PGEs).
- Design follow-up drill holes to target the DHEM conductor.
- Awaiting drill assay from the recent Sterling Prospect RC drilling program.

 Commence the RC drilling program at the Kelly's Prospect, following up on high-grade gold in rock chips (up to 15.5g/t Au) (RNS: THR announcement 25 July 2022).

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 recently granted E46/1393 (Figure 1)).



Figure 1: Tenement location map showing the gossan position, Krona Prospect adjacent to Sterling Prospects 13km gold trend

Krona Prospect - Nickel Gossan

One RC drill hole of 174m was drilled to test the shallow (100m) conductor identified by the high-powered Fixed Loop Electromagnetics (FLEM) ground geophysics survey completed in June 2022 at the Krona Prospect. Due to the steep slopes around the gossan, the closest achievable collar position was around 50m from the SE corner of the plate and 130m from the plate's centre.

An intersection of **66m @ 0.19% Nickel** from 81m was returned in 22RRRC045. Whilst the hole intersected the modelled EM plate, it did not intersect massive or disseminated sulphides. It did however intersect a graphitic shale from 60-72m down hole, but this did not explain the source of the conductor as it was too shallow (~50m above the modelled plate).



Figure 2: FLEM survey showing EM conductor and location of RC drill hole overlain on the 100K GSWA Geology.

To resolve the source of the conductor, the hole was cased and a down-hole electromagnetic (DHEM) survey was completed by Vortex Geophysics. This used a small 100m x 150m loop, oriented to couple both with flat lying conductors, below the loop, and steeply dipping conductors in the vicinity of the graphitic zone at ~70m down hole. The layout is shown in Figure 3.



Figure 3: EM conductor identified by FLEM survey and location of RC drill hole trace overlain on the airphoto.

The DHEM identified a clear off-hole conductor at around 85m down hole, with a modelled response of - 42° dip towards 312° azimuth and has a plunge of 14° to the NE but appears to flatten in places. The plunge is not well constrained and could be traded off against a small shift in the modelled plate along strike.

The modelled plate and the down hole response for channel 11 (1.8695 m Sec) are shown in Figure 4. If the modelled plate is extrapolated up dip it intersects the hole at a depth of around 30m, not at the graphitic intersection at ~70m as one might expect if that was the source of the conductor. The tenor of the EM response does not suggest a massive nickel sulphide source or even a strong conductor, but it may be networked sulphides which warrants a drill hole to test it. The local geological regime is interpreted to be a broad NE trending fault zone (Figure 5) with the Krona gossan sitting above its hanging wall and the modelled plate and graphite zone sitting closer to its footwall.



Figure 4: View from WNW showing the measured DHEM Ch11 response, FLEM modelled plate (red) and DHEM modelled plate (black).



Figure 5: Plan view of the interpreted DHEM plate (yellow), gossan outline (purple), DHEM loop and FLEM lines (blue), drill hole and contours of Ch21 total field magnitude from the FLEM overlain on a greyscale image of the AGC of the TMI.

Downhole Geochemistry

Lab assay data from sampling of 22RRRC045 was analysed in ioGAS software. This verified that there were anomalous nickel assays above the background range naturally expected in an ultramafic lithology. In addition, the Fe vs Ni graph showed that iron was not preferentially scavenging nickel (thus not producing false anomalies), and there were zones of sequential negative correlation downhole as shown in Figure 6.



Figure 6: All assay data from 22RRRC045, showing the anomalous Ni assays above the normal range expected in ultramafic rocks. The sequential negative correlation of Fe and Ni from 51-57m down hole (green dots) and 80-99m down hole (blue dots) are shown, and the red dots are the remainder of the anomalous Ni assays.

By using the 'real' nickel anomalies in Figure 6, significant nickel intersections in 22RRRC045 are more accurately reported in Table 1 and Figure 7.

Hole ID	Intersection	From depth (m)	To Depth (M)	Interval (m)	Nickel (Ni) %
22RRRC045	А	12	21	9	0.16
22RRRC045	В	38	59	21	0.13
22RRRC045	C	81	99	18	0.18
22RRRC045	D	108	129	21	0.21

Table 1: Significant intersections from the anomalous nickel zone in Figure 6



Figure 7: Down-hole assay data from 22RRRC045, showing the anomalous Ni assays in relation to the same red, green, blue and black dots from Figure 6.

Table B – RC Drill hole collar details

Hole ID	MGA94 E	MGA94 N	M ASL	Dip	Azi (True N)	Depth (m)
22RRRC045	782678	7580968	397	-53	303	174

References:

• Bagas *et al.*, 2004. Geology of the Spilt Roc 1:100,000 Sheet. 1:00,000 Geological Series. Geological Survey of Western Australia

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

For further information, please contact:

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This announcement contains inside information for the purposes of Article 7 of the UK version of Regulation (EU) No 596/2014 which is part of UK law by virtue of the European Union (Withdrawal) Act 2018, as amended ("MAR"). Upon the publication of this announcement via a Regulatory Information Service, this inside information is now considered to be in the public domain.

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 km² 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 gold¹.

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.²³

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 resources⁴, 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. ⁵

<u>Notes</u>

¹ <u>www.thormining.com/sites/thormining/media/pdf/asx-announcements/20210127-maiden-copper.gold-estimate-alford-east-sa.pdf</u>

² <u>www.thormining.com/sites/thormining/media/pdf/asx-announcements/20172018/20180222-clarification-kapunda-copper-resource-estimate.pdf</u>

³ <u>www.thormining.com/sites/thormining/media/aim-report/20190815-initial-copper-resource-estimate---moonta-</u> <u>project---rns---london-stock-exchange.pdf</u>

⁴ www.thormining.com/sites/thormining/media/pdf/asx-announcements/20210408-molyhil-mineral-resource-estimateupdated.pdf

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

1 JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 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. 	The programme comprised rock chip sampling based on geological outcrops, with analysis for Au by 25g fire assay FA001 and multi-element by mixed acid digest – ICP-AES MA101 and ICP-MS MA102 at Bureau Veritas Minerals Laboratory in Adelaide SA
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	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	Not applicable – no drilling reported
Logging	 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	No logging was undertaken. Lithological description recorded for all samples collected
Sub- sampling techniques	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and 	Samples were screened in the field as described in "Sampling Techniques" above. The sample sizes

are as per in	dustry
standard	for
stream	

Criteria	JORC Code explanation	Commentary
and sample preparation	 appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	sediment geochemistry. Field duplicates and blank samples were submitted for assay with the other samples.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. 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. 	The proposed assay method is appropriate for preliminary exploration.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	Not undertaken
Location of data points	 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. Specification of the grid system used. Quality and adequacy of topographic control. 	Hand held GPS – MGA94 zone 50 (GDA)
Data spacing and distribution	 Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied. 	Not applicable – no resource is being reported
Orientation of data in relation to geological structure	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 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. 	Orientational bias is not applicable to stream and 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

		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	 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. 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. 	Exploration results are reported on E46/1190, E46/1262, 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. No previous lithium exploration.
Geology	Deposit type, geological setting and style of mineralisation.	Yet to be determined
Drill hole Information	 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: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 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. 	No drilling has been undertaken or reported

Data aggregation methods	 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. 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. assumptions used for any reporting of metal equivalent The values should be clearly stated. 	Only rock chip and stream assays have been reported. There has been no data aggregation.
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. 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'). 	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	 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. 	All data have been reported
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale stepout drilling). 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 geological mapping will be undertaken over tenure , including Sterling and Kelly's prospects.

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