

17 June 2022

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Shares: THORF

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Mark McGeough  
Alastair Clayton

**Key Projects:**

- **Gold/Lithium/Nickel**  
*Ragged Range Pilbara WA*
- **Copper**  
*Alford East SA*
- **Uranium / Vanadium**  
*Colorado / Utah USA*
- **Tungsten**  
*Molyhil NT*

**Company Announcements Office**

**ASX Securities Limited,  
20, Bridge Street,  
Sydney, N.S.W. 2000**

**Ragged Range Project, WA**

**Electromagnetic Conductor identified beneath Nickel Gossan**

The directors of Thor Mining Plc ("Thor") (AIM, ASX: THR, OTCQB: THORF) are pleased to announce that the recently completed electromagnetic geophysics survey over the nickel gossan at the Krona Prospect identified a conductive anomaly at the Company's 100% owned Ragged Range Project, located in the Eastern Pilbara, Western Australia.

**Project highlights:**

- A high-powered Fixed Loop Electromagnetics (FLEM) ground geophysics survey has identified a shallow conductor beneath the nickel gossan at the Krona Prospect (Figure 1 and Figure 2).
- The conductor is 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.
- The shallow conductor will be drill tested including downhole EM, as part of the upcoming reverse circulation (RC) drilling program scheduled to commence next week at the Sterling Gold Prospect.



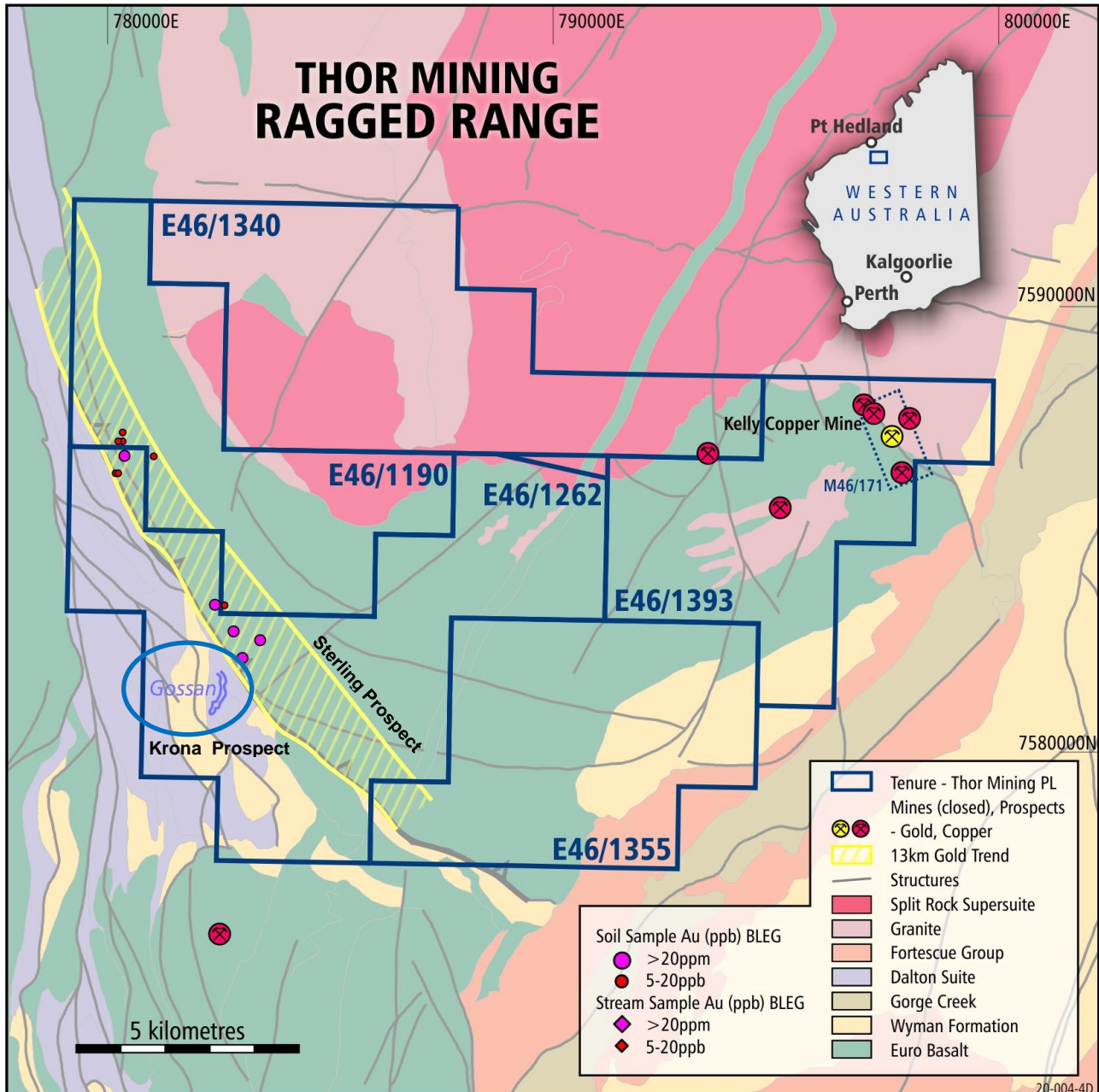
**Nicole Galloway Warland, Managing Director of Thor Mining, commented:**

*"I am encouraged that the first ground geophysics survey at Ragged Range has identified a shallow electromagnetic conductor. The target is modelled at around 100m below the surface, establishing it a clear drill target for the upcoming RC drilling program.*

*We look forward to drill testing this anomaly as part of our RC drilling program, scheduled to commence at Sterling Prospect next week."*

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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

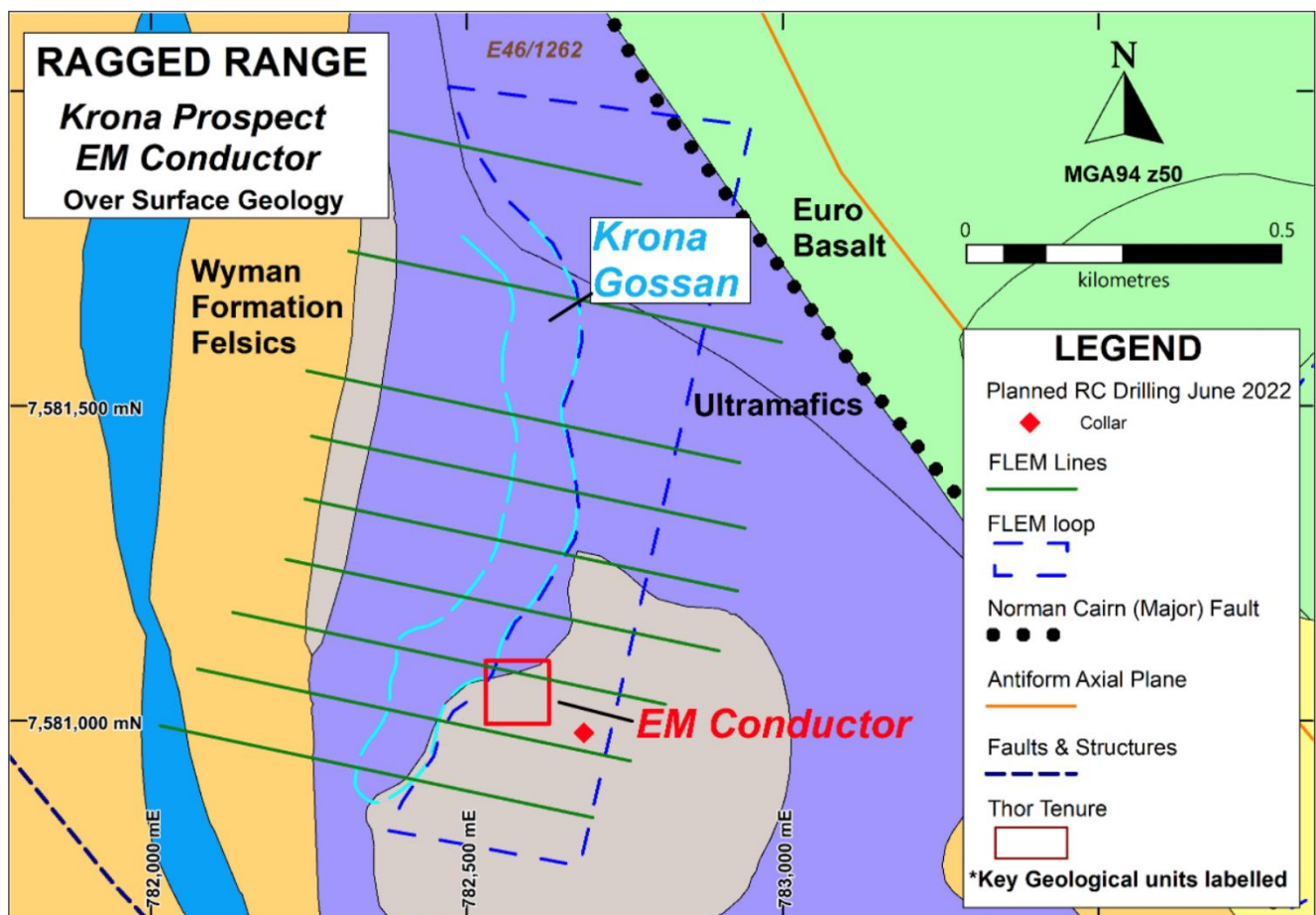
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## Krona Prospect - Nickel Gossan

A high-powered Fixed Loop Electromagnetics (FLEM) ground geophysics survey was completed over the Krona Prospect, covering the full extent of the nickel gossan, located in the western portion of the tenure (Figures 1 and 2). This is the first ground geophysics survey on the Ragged Range Project. The survey over the gossan was designed to detect conductive anomalies at depth that may indicate the presence of massive nickel-copper sulphide mineralisation to constrain initial drill testing.

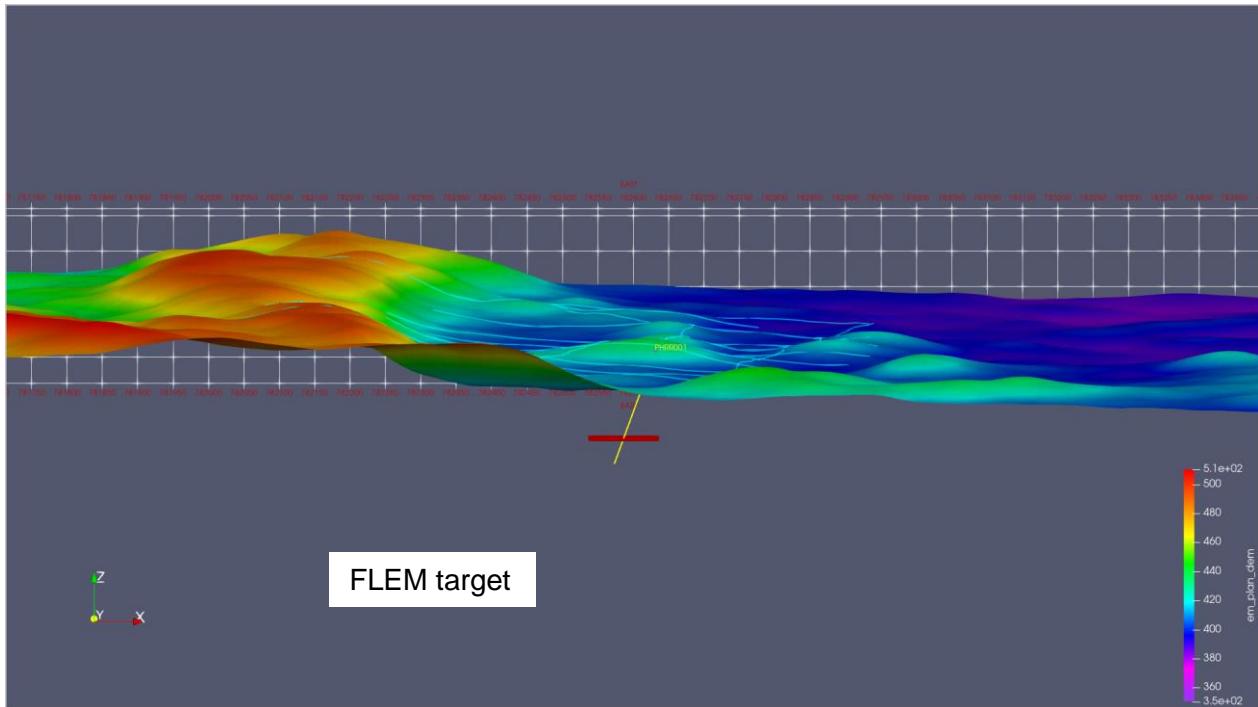
A single loop FLEM survey over the Krona prospect identified a conductor at the southern end of the gossan (Figure 2). The conductor was modelled as a shallow flat lying feature approximately 100m deep (Figure 3) and is consistent with sulphides. The shallow (100m) conductor gives Thor a clear drill target, that will be drill tested as part of the upcoming RC program at the adjacent Sterling Prospect (Figure 3).

The gossan was initially identified by the Western Australian Geological Survey on the Split Rock 1:100K mapping explanatory notes (Bagas et al., 2004). The gossan extends over 1km x 100m and lies on the basal contact of the Dalton Suite ultramafics, with the older Wyman Formation, felsic volcanics.



**Figure 2:** FLEM survey showing EM conductor overlain on the 100K GSWA Geology.

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**Figure 3: 3D modelled conductor**

### Next Steps

- Commence RC drilling program at Sterling Prospect following up on structurally controlled anomalous gold in streams and soils.
- Drill test EM conductor at Krona Prospect as part of RC drilling program, with downhole EM.
- An Airborne magnetic/radiometric survey, scheduled to be flown over the eastern portion of the tenure (including E46/1340 and E46/1393) in the near future.
- Continue regional exploration, focusing on both lithium priority areas and the copper-gold historic workings in the northeastern portion of tenure.

### References:

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



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

For further information, please contact:

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### **Competent Persons Report**

*The information in this report that relates to **Geophysical Exploration Results** is based on information compiled by Kim Frankcombe, a Competent Person who is a Member of The Australian Institute of Geoscientists. Mr Frankcombe is employed as a Consultant to the Company through geophysical consultancy. Mr Frankcombe 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 Frankcombe consents to the inclusion in the report of the matters based on his information and the form and context in which it appears.*

*The information in this report that relates to **Geological interpretation and 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 [www.thormining.com](http://www.thormining.com), which includes a facility to register to receive these updates by email, and on the Company's Twitter page [@ThorMining](https://twitter.com/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 the USA and Australia. Its focus is on progressing its copper, gold, uranium and vanadium projects, while seeking investment/JV opportunities to develop its tungsten/molybdenum 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, with follow up drilling planned for 2022.

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>.

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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. Drilling in November December 2021 intersected strike extensions to the main ore zone.

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.

Notes

<sup>1</sup> [www.thormining.com/sites/thormining/media/pdf/asx-announcements/20210127-maiden-copper.gold-estimate-alford-east-sa.pdf](http://www.thormining.com/sites/thormining/media/pdf/asx-announcements/20210127-maiden-copper.gold-estimate-alford-east-sa.pdf)

<sup>2</sup> [www.thormining.com/sites/thormining/media/pdf/asx-announcements/20172018/20180222-clarification-kapunda-copper-resource-estimate.pdf](http://www.thormining.com/sites/thormining/media/pdf/asx-announcements/20172018/20180222-clarification-kapunda-copper-resource-estimate.pdf)

<sup>3</sup> [www.thormining.com/sites/thormining/media/aim-report/20190815-initial-copper-resource-estimate---moonta-project--rns---london-stock-exchange.pdf](http://www.thormining.com/sites/thormining/media/aim-report/20190815-initial-copper-resource-estimate---moonta-project--rns---london-stock-exchange.pdf)

<sup>4</sup> [www.thormining.com/sites/thormining/media/pdf/asx-announcements/20210408-molyhil-mineral-resource-estimate-updated.pdf](http://www.thormining.com/sites/thormining/media/pdf/asx-announcements/20210408-molyhil-mineral-resource-estimate-updated.pdf)

<sup>5</sup> [www.thormining.com/sites/thormining/media/pdf/asx-announcements/20200129-mineral-resource-estimates---bonya-tungsten--copper.pdf](http://www.thormining.com/sites/thormining/media/pdf/asx-announcements/20200129-mineral-resource-estimates---bonya-tungsten--copper.pdf)

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## 1. 2012 Edition – Table 1 report template

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, 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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<p>No new drilling or surface sampling in this release.</p> <ul style="list-style-type: none"> <li>THR is reporting the results of a ground electromagnetic survey conducted by Vortex geophysics PTY LTD which commenced on the 10 May 2022 and finished on the 26 May 2022</li> <li>The electromagnetic data was acquired using a Emit SmarTEM 24, 16 channel receiver with 3 component smart fluxgate.</li> <li>1 Vortex VTX-100 transmitter and associated generator.</li> <li>The FLEM system specifications are as follows: <ul style="list-style-type: none"> <li>o Sensor configuration: 3 component smart fluxgate magnetometer.</li> <li>o Receiver=SmartTEM-24</li> <li>o Transmitter=Vortex VTX-100</li> </ul> </li> <li>Tx Current = is 50-60A for 400x 600m loops. 80A for the 300x200m loop</li> <li>o Base Frequency = 2.5 Hz</li> <li>o Off time = 100 msec</li> <li>o GPS control = handheld GPS.</li> </ul>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (e.g.core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g.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>Not applicable – No drilling reported</p>
Drill sample recovery	<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>Not applicable- No drilling reported</p>

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Logging	<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>	Not applicable- No drilling reported
Sub- sampling techniques and sample preparation	<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> <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>	Not applicable- No drilling reported
Criteria	JORC Code explanation	Commentary
Quality of assay data and laboratory tests	<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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<p>No drilling reported Vortex Geophysics conducted the FLEM survey.</p> <ul style="list-style-type: none"> <li>The electromagnetic data was acquired using a Emit SmarTEM 24, 16 channel receiver with 3 component smart fluxgate.</li> <li>1 Vortex VTX-100 transmitter and associated generator.</li> <li>The FLEM system specifications are as follows: <ul style="list-style-type: none"> <li>Sensor configuration: 3 component smart fluxgate magnetometer.</li> <li>Receiver=SmartTEM-24</li> <li>Transmitter=Vortex VTX-100</li> </ul> </li> <li>Tx Current = 50A for 100-200m/50 line/station spacing. <ul style="list-style-type: none"> <li>Base Frequency = 0.5 Hz <ul style="list-style-type: none"> <li>Off time = 500 msec</li> </ul> </li> </ul> </li> <li>9 lines/134 stations</li> <li>Distanced surveyed 6.3km</li> </ul>



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Verification of sampling and assaying	<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>FLEM - Data received is preliminary in nature and has been reviewed by Kim Frankcombe ExploreGeo Pty Ltd geophysical consultant.</p> <p>FLEM conductors have been selected by Kim Frankcombe ExploreGeo Pty Ltd geophysical Consulting.</p>
Location of data points	<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>	<p>No drilling reported</p> <ul style="list-style-type: none"> <li>FLEM - Data using a handheld GPS <ul style="list-style-type: none"> <li>GDA94 Zone 50.</li> </ul> </li> </ul>
Data spacing and distribution	<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>	<p>FLEM line spacing is appropriate for exploration purposes.</p>
Orientation of data in relation to geological structure	<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>Fix loop Electromagnetics lines were oriented perpendicular to gossan trend.</p>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<p>No sampling reported.</p>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<p>None undertaken.</p>
Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<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>Exploration results are reported on E46/1262 in Western Australia held 100% by Pilbara Minerals Pty Ltd (100% subsidiary of Thor Mining PLC).</p> <p>The tenement is secure under WA legislation and is in good standing.</p>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<p>Geological mapping and stream sediment sampling by Great Southern Mines and Thor Mining. Open File Report A050141-Surrender Report.</p>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<p>Yet to be determined.</p>

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Drill hole Information	<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>	No drilling has been undertaken or reported.
Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. 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>	Only field observations have been reported. There has been no data aggregation.
Relationship between mineralisation widths and intercept lengths	<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 (e.g. 'down hole length, true width not known').</li> </ul>	No drilling has been undertaken or reported.
Diagrams	<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>	See body of report.
Balanced reporting	<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 to avoid misleading reporting of Exploration Results.</li> </ul>	FLEM data is reported for Krona Prospect.
Other substantive exploration data	<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>	All data have been reported.

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*Further  
work*

- *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out 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 the EM conductor identified from the FLEM survey will be drill tested to validate – diagram included in report showing potential drillhole location,