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**THOR MINING PLC**

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**Key Projects:**

- **Tungsten**  
*Molyhil NT*  
*Pilot Mountain USA*
- **Copper**  
*Kapunda SA*

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**FURTHER HIGH GRADE MOLYHIL BULK SAMPLE ASSAY RESULTS**

The Board of Thor Mining Plc ("Thor") (AIM, ASX: THR) is pleased to announce further positive assay results from the second metallurgical bulk sample drill hole at the company's wholly owned Molyhil tungsten molybdenum deposit, in the Northern Territory of Australia.

The second of two PQ (85mm) diamond drill holes drilled down plunge of the Molyhil Yacht Club lode to obtain material for production of tungsten and molybdenum concentrate samples has now been assayed.

**Highlights include;**

- **3.5m @ 1.32%WO<sub>3</sub> from 9.5m**
- **10m @ 0.32% Cu from 44m**
- **10m @ 1.32%WO<sub>3</sub> from 53m**
- **5m @ 1.74%WO<sub>3</sub> from 76m including 2m @ 0.81%Mo from 78m and;**
- **7m @ 1.58%WO<sub>3</sub> from 88m including 4m @ 0.44%Mo from 88m**

The holes were designed specifically for production of concentrate samples and will not contribute to the mineral resource estimate.

Following the results, Thor has commissioned RPMGlobal to upgrade the Molyhil Mineral Resource Estimate to include copper.

**Mick Billing, Executive Chairman, commented:**

*"It is very rewarding to have more high tenor bulk sample assay results at Molyhil and to have confirmation of extensive high-grade scheelite and molybdenum mineralisation."*

*"The continued confirmation of copper mineralisation at potentially economic levels is also very pleasing. Thor has commissioned a review of the resource estimate for Molyhil to include this, however until that work is complete, we can ascribe no additional value for any potential copper at this time."*

*"Since acquiring the Bonya properties, ongoing studies on the combined Molyhil-Bonya project have identified the copper potential of Bonya and its potential suitability for processing at Molyhil (news releases 26 November 2018 and 7 May 2019). This has led to the reappraisal of the economic potential for copper at Molyhil."*

An historic Molyhil Mineral Resource Estimate with copper included is available on the ASX website, and can be viewed, on page 33 of 124, via the following link:

<https://www.asx.com.au/asxpdf/20060817/pdf/3y0txr8b44pkk.pdf>

The information is extracted from the Thor Mining plc ASX listing prospectus issued August 2006 and is available to view on the ASX website. The company confirms that it is not aware of any new information or data in respect of copper values reported at the time, that materially affects the information included in the original market announcement and, in the case of estimates of Mineral Resources or Ore Reserves, that all material assumptions and technical parameters underpinning the estimates of copper values in the relevant market announcement continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.



Figure 1: Photograph of portion of the metallurgical core sample under ultraviolet light (highlighting scheelite mineralisation)

## Further Information

The drill program comprised 195.6 metres of PQ (85.5mm diameter) diamond drilling into the Yacht Club lode of the Molyhil deposit. The holes were designed to retrieve high grade mineralisation and as a result are not appropriate for estimating the resource or the mineralisation geometry including true widths.

Hole ID	Deposit	Easting GDA94 zone 53)	Northing GDA94 zone 53)	Elevation (m ASL)	Azi - muth	Dip	Hole depth (m)	Intersection
19DD001	Molyhil	577047	7482977	411	142	-70	97.8	5.5m @0.22% Mo from 9.5m including 3.5m @ 1.32% WO3 from 9.5m 10m @ 0.32% Cu from 44m including 1m @ 0.7% WO3 from 49m 10m @ 1.32% WO3 from 53m 5m @ 0.13% Mo from 63m 1m @ 0.14% Mo from 72m 3m @ 0.15% Cu from 73m 5m @ 1.74% WO3 from 76m including 2m @ 0.81% Mo from 78m 7m @ 0.12% Cu from 79m 7m @ 1.58% WO3 from 88m including 4m @ 0.44% Mo from 88m, and 2m @ 0.175% Cu from 91m 2m @ 0.15% Mo from 95m
19RC002	Molyhil	577051	7482973	410.7	144	-55	97.7	92.6 metres @ 1.0% WO <sub>3</sub> , 0.16% Mo and 0.13% Cu from 0m
Estimated true width is not available due to inappropriate hole orientation								

Table A: Molyhil down plunge metallurgical sample intercepts



Figure 2: Map showing the diamond drill hole location

For further information, please contact:

## **THOR MINING PLC**

Mick Billing Executive Chairman  
+61 8 7324 1935

### **Competent Person's Report**

*The information in this report that relates to exploration results is based on information compiled by Richard Bradey, who holds a BSc in applied geology and an MSc in natural resource management and who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Bradey is an employee of Thor Mining PLC. He has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he 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'. Richard Bradey consents to the inclusion in the report of the matters based on his 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) is a resources company quoted on the AIM Market of the London Stock Exchange and on ASX in Australia.*

*Thor holds 100% of the advanced Molyhil tungsten project in the Northern Territory of Australia, for which an updated feasibility study in August 2018<sup>1</sup> suggested attractive returns.*

*Adjacent Molyhil, at Bonya, Thor holds a 40% interest in deposits of tungsten, copper, and vanadium, including an Inferred resource for the Bonya copper deposit<sup>2</sup>.*

*Thor also holds 100% of the Pilot Mountain tungsten project in Nevada USA which has a JORC 2012 Indicated and Inferred Resources Estimate<sup>3</sup> on 2 of the 4 known deposits. The US Department of the Interior has confirmed that tungsten, the primary resource mineral at Pilot Mountain, has been included in the final list of Critical Minerals<sup>6</sup>2018.*

*Thor is also acquiring up to a 30% interest 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 in South Australia recoverable by way of in situ recovery<sup>4</sup>, and also holds rights to earn a 75% interest in portion of the Moonta Copper project also in South Australia, and is considered amenable to recovery by way of in situ recovery<sup>5</sup>.*

*Thor has an interest in Hawkstone Mining Limited, an Australian ASX listed company with a 100% Interest in a Lithium project in Arizona, USA.*

*Finally, Thor also holds a production royalty entitlement from the Spring Hill Gold project<sup>6</sup> of:*

- *A\$6 per ounce of gold produced from the Spring Hill tenements, sold for up to A\$1,500 per ounce; and*
- *A\$14 per ounce of gold produced from the Spring Hill tenements, sold for amounts over A\$1,500 per ounce.*

### **Notes**

<sup>1</sup> Refer ASX and AIM announcement of 23 August 2018

<sup>2</sup> Refer ASX and AIM announcement of 26 November 2018

<sup>3</sup> Refer AIM announcement of 13 December 2018 and ASX announcement of 14 December 2018

<sup>4</sup> Refer AIM announcement of 10 February 2016 and ASX announcement of 12 February 2018

<sup>5</sup> Refer AIM announcement of 5 March 2019 and ASX announcement of 6 March 2019

<sup>6</sup> Refer AIM announcement of 26 February 2016 and ASX announcement of 29 February 2016



## JORC Code, 2012 Edition – Table 1 report

### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</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>	Diamond drilling was used to produce core. One hole was whole core crushed from which representative samples were taken and assayed while the other hole was quarter cored by diamond saw and assayed in metre sample intervals.
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	PQ diameter core was taken for the entire length of the holes. The core was not oriented.
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	After minor core loss at the collar (12% in first 1.7m run), 100% core recovery was achieved for the remainder of both holes.
<b>Logging</b>	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	Core was logged geologically and photographed for the entire length of each hole. Mineralised and unmineralised zones were confidently determined from geological observations.
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <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>	<p>Quarter core sawn and sampled in metre intervals.</p> <p>Industry standard internal laboratory QAQC procedures were applied.</p> <p>No quality control measures were included with the core samples. PQ core is adequate size to represent the material sampled.</p>

Criteria	JORC Code explanation	Commentary
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</li> </ul>	<p>Industry standard sample preparation finishing with sample pulverisation to 80% passing 75µm. Analysis was via lithium borate fusion and ICP-MS Which is considered appropriate for the analyte suite.</p> <p>Internal laboratory QA/QC protocol was implemented in the assay process.</p>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<p>Intersections reported correspond with visual indications in samples. No further independent verification has been undertaken.</p>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<p>Hand held GPS – accuracy is within +/- 2m horizontally and 5m vertically. There was no downhole survey.</p> <p>Grid system used is GDA94, zone 53.</p>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<p>Drilling was designed to maximise metallurgical sample and thus orientation is not appropriate for resource estimation.</p>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<p>Drilling was designed to maximise metallurgical sample and thus orientation is not appropriate for resource estimation.</p>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	None
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	None

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	ML23825 100% Thor Mining PLC
<b>Exploration done by other parties</b>	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	na

Criteria	JORC Code explanation	Commentary
<b>Geology</b>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralisation.</i></li> </ul>	Contact metamorphic skarn
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>• <i>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:</i> <ul style="list-style-type: none"> <li>▪ <i>easting and northing of the drill hole collar</i></li> <li>▪ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>▪ <i>dip and azimuth of the hole</i></li> <li>▪ <i>down hole length and interception depth</i></li> <li>▪ <i>hole length.</i></li> </ul> </li> <li>• <i>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.</i></li> </ul>	<p>Drill hole data tabulated in the text of the report.</p> <p>The drill holes have not been adequately surveyed and therefore do not provide reliable data for the estimation or validation of the Molyhil resource estimate.</p>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> <li>• <i>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.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<p>Drill interval summaries are determined based on a cut off grade of 0.1%WO<sub>3</sub> and a maximum waste width of 2 metres.</p> <p>No metal equivalents have been reported.</p>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>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').</i></li> </ul>	Only down hole intervals have been provided. The hole orientations are not appropriate to determine true widths of mineralisation. This has been stated in the text of the report.
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	Location plan has been provided. No section has been provided due to the absence of downhole survey data.
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	All mineralised intervals above 0.1% WO <sub>3</sub> have been reported
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>• <i>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.</i></li> </ul>	No other data available
<b>Further work</b>	<ul style="list-style-type: none"> <li>• <i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> </ul>	No further work is planned.

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	