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**THOR MINING PLC**

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AIM & ASX Listings:  
Shares: THR

Directors:  
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David Thomas  
Alastair Middleton  
Richard Bradey

**Key Projects:**

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

**Company Announcements Office**  
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**BONYA TUNGSTEN & MULTI COMMODITY PROSPECTS**  
**LICENCE TRANSFER APPROVED**

The Board of Thor Mining Plc ("Thor") (AIM, ASX: THR) is pleased to announce that further to the announcements made on 28 March 2018 and 19 April 2018, ministerial approval has now been received for Thor's acquisition of interests in the tungsten, copper, and vanadium hosted Bonya tenements adjacent to the Molyhil mine project in the Northern Territory.

**Highlights:**

- Thor acquiring 40% interest in exploration licence EL29701 which hosts **13 outcropping tungsten deposits**;
- Exploration licence also hosts **Bonya copper deposit** with exciting previous drilling results;
- Exploration licence also hosts **Jervois vanadium/titanium deposit** with high grade vanadium drilling results;
- Thor acquiring 100% interest in exploration licence EL29599 considered prospective for copper mineralisation;
- Project area exploration target\* of 3.0 - 4.9 million tonnes @ 0.3% - 0.5% WO<sub>3</sub>;
- Total consideration of A\$550,000 in Thor shares, subject to 90day trading restriction;

*\*Exploration Targets are conceptual in nature and there has been insufficient exploration to define a Mineral Resource under the JORC Code and it is uncertain if further exploration will result in the determination of a Mineral Resource.*

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

*"This is outstanding news for the Molyhil development. The potential to increase both the scale and the life of the proposed Molyhil operation is very exciting. The proximity of the Bonya deposits to Molyhil should add significantly to the projected economic returns, dovetailing with our commercialisation strategy for Molyhil. In addition to robust levels of tungsten, it is encouraging that the assay results showed low levels of potential penalty elements and overall coarse grain mineralisation, potentially simplifying processing."*

"We plan to drill some of these deposits as soon clearance is achieved. Provided some of these known prospects mature, along with others which we expect to find and develop, it is more than likely that Molyhil production life and throughput volume should increase substantially."

"The potential for small but high-grade copper deposits, including the Bonya copper deposit is also very attractive with the proposed processing plant at Molyhil also suitable for copper flotation"

"Jervois vanadium / titanium historical drilling programs have resulted in very high grade assays, and we plan to review this very exciting opportunity in the coming weeks. Global vanadium pricing has moved up aggressively over the past few weeks, with Argus Metals quoting the latest price for vanadium contained within ferro vanadium delivered Rotterdam at US\$100,000/tonne at 20 September 2018."

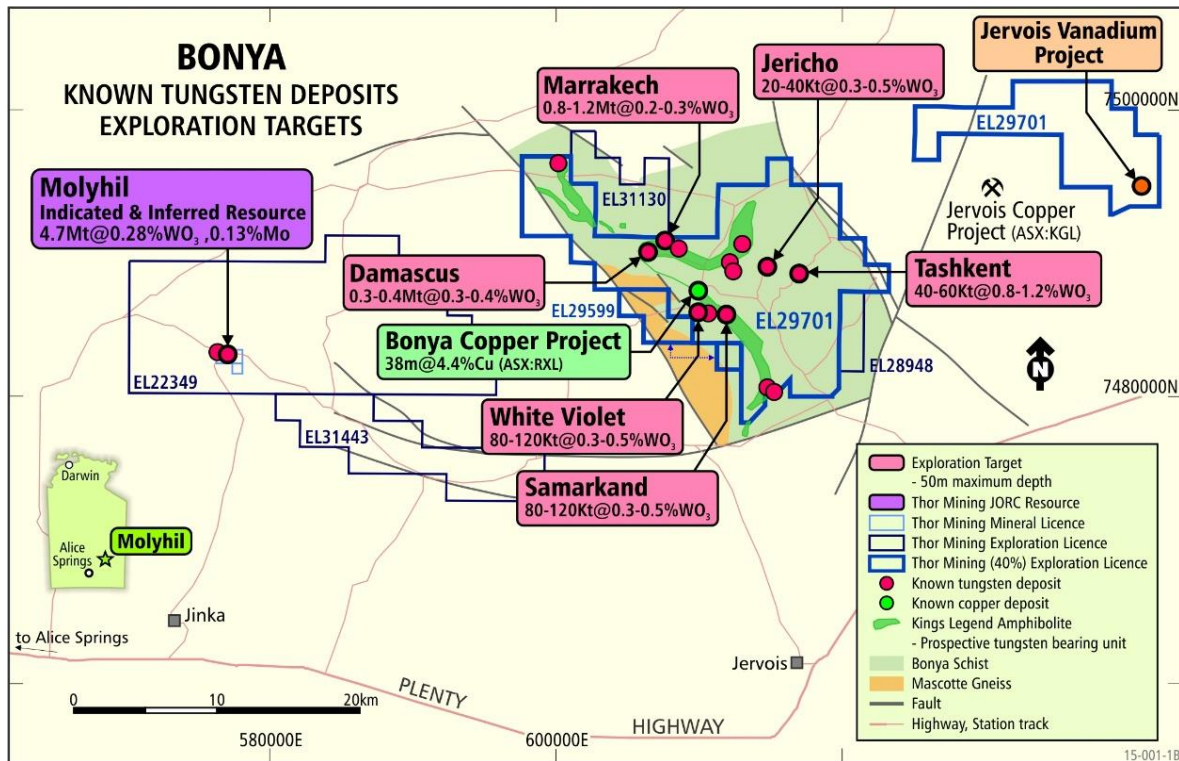


Figure 1: Bonya Project location plan with tungsten exploration targets.

## Agreement Structure and Commercial Terms

Under the terms of the agreement, Thor for consideration of A\$550,000 in fully paid Thor shares, acquires;

- a 40% interest in Exploration Licence EL29701; and
- 100% interest in Exploration Licence EL29599.

The consideration shares are to be valued according to the average of the 5 day VWAP (volume weighted average price) on ASX for the 5 days preceding execution of the terms sheet and the 5 day VWAP for the 5 days preceding satisfaction of all conditions precedent to the sale. The issue of these securities is expected to be within existing approval levels under ASX listing rule LR7.1.

It is expected that these consideration shares will be issued within the next five working days.

A Joint Venture Agreement currently exists between Rox and Arafura Resources Limited ("Arafura") (ASX:ARU). Thor and Arafura are working towards execution of a Deed of Assumption under which Thor agrees to be bound by the provision of that agreement.

## Bonya Project Geology

The Bonya tenements are located in the highly prospective Eastern Aileron Province between the Jervois

base metals deposits to the east and the Molybdenum tungsten molybdenum deposit to the west. The multiple deposits identified within the tenements are closely associated with the Kings Legend Amphibolite which extends over many kilometres. Tungsten mineralisation comprises coarse grain scheelite with only trace amounts of molybdenum. Copper is associated with many of the deposits. There has been no contemporary tungsten exploration efforts in the area since the 1970's when the deposits were found by prospectors. The quoted exploration targets are based upon a combination of surface mapping, channel and rock chip sampling, as well as historic drill results. A maximum depth projection of 50 metres was used.

**Table B: Bonya Scheelite Exploration Target\* Summary**

Source Rank	Tonnage (Mt)	% WO <sub>3</sub>	Comment
Tier 1	0.2 – 0.3	0.3 – 0.5	Targets based on 1970s costean sampling and drilling.
Tier 2	1.2 – 1.9	0.2 – 0.4	Outcropping satellite targets which have been mapped and described but have no drill or sample data
Tier 3	1.6 – 2.7	0.3 – 0.5	Exploration targets based on proximity to known mineralisation, favourable geology and/or geophysical signature.
<b>Total Exploration Target*</b>	<b>3.0 – 4.9</b>	<b>0.3 – 0.5</b>	<b>Combined Tier 1, 2 &amp; 3</b>

For detailed Exploration Target description refer to THR ASX announcement dated 29 March 2018: <https://www.asx.com.au/asxpdf/20180329/pdf/43stfj43dqsm.pdf>

#### Jervois Vanadium / Titanium Deposit

Drilling campaigns by Arafura have been reported:

- 19 June 2007 <https://www.asx.com.au/asxpdf/20070619/pdf/3130nxq19wp71q.pdf> and also
- 29 July 2010 <https://www.asx.com.au/asxpdf/20100729/pdf/31rkpl7q8yfn81.pdf>

High grade **vanadium** assays include:

UNRC001	44 metres @ 0.76% V <sub>2</sub> O <sub>5</sub>
UNRC002	22 metres @ 0.77% V <sub>2</sub> O <sub>5</sub>
UNRC005	21 metres @ 0.62% V <sub>2</sub> O <sub>5</sub>
UNRC018	49 metres @ 0.96% V <sub>2</sub> O <sub>5</sub>
UNRC019	54 metres @ 0.72% V <sub>2</sub> O <sub>5</sub>
UNRC024	50 metres @ 0.62% V <sub>2</sub> O <sub>5</sub>

#### Bonya Copper Deposits

The historic Bonya copper mine has been the subject of drilling campaigns by Rox reported:

- 1 December 2014 <https://www.asx.com.au/asxpdf/20141201/pdf/42v5b04mcsv2zg.pdf> , and also
- 21 December 2015 <https://www.asx.com.au/asxpdf/20151221/pdf/433yvfvgymq82v.pdf> .

High grade **copper** assays reported from the 2014 drilling program include:

BYRC008	11m @ 4.4%Cu from 30m, including 3m @ 6.1%Cu from 33m
BYRC009	38m @ 4.4%Cu from 60m, including 6m @ 8.8%Cu from 60m, and 8m @ 7.9%Cu from 82m
BYRC012	9m @ 3.8%Cu from 97m, including 3m @ 8.2%Cu from 97m
BYRC014	8m @ 7.6%Cu from 97m, including 3m @ 12.0%Cu from 101m, and 13m @ 5.4%Cu from 111m, including 9m @ 7.4%Cu from 114m
BYRC015	9m @ 2.8%Cu from 100m, including 4m @ 3.9%Cu from 101m
BYRC018	5m @ 9.1%Cu from 109m, including 3m @ 13.4%Cu from 109m, and 11m @ 3.9%Cu from 121m

For further information, please contact:

**THOR MINING PLC**

Mick Billing Executive Chairman  
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**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 Molybdenum tungsten project in the Northern Territory of Australia, for which an updated feasibility study in August 2018<sup>1</sup> suggested attractive returns.*

*Thor also holds 100% of the Pilot Mountain tungsten project in Nevada USA which has a JORC 2012 Indicated and Inferred Resources Estimate<sup>2</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 2018.*

*Thor is also acquiring up to a 60% interest Australian copper development company Environmental Copper Recovery SA Pty Ltd, which in turn holds rights to earn up to a 75% interest in the mineral rights and claims over the resource<sup>3</sup> on the portion of the historic Kapunda copper mine in South Australia recoverable by way of in situ recovery.*

*Thor has a material 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>4</sup> of:*

- A\$6 per ounce of gold produced from the Spring Hill tenements where the gold produced is sold for up to A\$1,500 per ounce; and*
- A\$14 per ounce of gold produced from the Spring Hill tenements where the gold produced is 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 AIM announcement of 22 May 2017 and ASX announcement of 23 May 2017*
- <sup>3</sup> Refer AIM announcement of 10 February 2016 and ASX announcement of 12 February 2018*
- <sup>4</sup> Refer AIM announcement of 26 February 2016 and ASX announcement of 29 February 2017*