



Thor Mining PLC - THR QUARTERLY REPORT JULY TO SEPTEMBER 2018
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THOR MINING PLC
("THOR" OR THE "COMPANY")
QUARTERLY REPORT JULY TO SEPTEMBER 2018

Highlights

Outlook for September Quarter 2018

TUNGSTEN & MULTI COMMODITIES

Molyhil, NT Australia

- Completion of Definitive Feasibility Study upgrade with strong economics.
- Completion of acquisition of 40% of Bonya project which hosts multiple outcropping tungsten deposits adjacent Molyhil.

- Marketing activities to lock in off-take agreements for both tungsten and molybdenum concentrates.
- Discussions with potential project financiers.
- Drilling approval for Bonya deposits

Pilot Mountain, Nevada USA

- Completion of Scoping Study indicating a potential 12 year life of mine.

- Stage 2 of metallurgical testwork.
- Environmental and Infrastructure studies

COPPER

Kapunda, SA Australia

- Announcement of Australian Commonwealth Government research grant of A\$2.85million.
- Successful leach test outcomes on core samples.

- Preparation for field pump testing.

CORPORATE & FINANCE

Cash position remains sound with forecast activities fully financed well into 2019.

Commenting, Mr Mick Billing, Executive Chairman of Thor Mining, said:

"A period of delivery, albeit there is still much more to do to achieve our goals."

"The Molyhil DFS upgrade, now completed, leads us to refocus on the next critical agenda items for this, our flagship project."

"We have intensified our efforts towards off-take & financing activities and we hope, during the coming months to announce progress towards these objectives."

"Additionally, securing equity in the nearby Bonya tenements, provides potential to increase both the life and the scale of Molyhil, while also providing exposure to very exciting copper and vanadium opportunities."

"The Pilot Mountain scoping study results are also very positive, and we now advance with confidence towards Pre-Feasibility Study activities."

"We will continue to provide investors with regular updates in respect of activities and progress."

TUNGSTEN PROJECTS

Tungsten and Molybdenum Price Trends

At the date of this report, the price of tungsten, per mtu of APT (Ammonium Para Tungstate) was US\$277.00/mtu, while the molybdenum price has held its strengthened position at around US\$12.15/lb. While the tungsten APT price weakened during the quarter, the price for tungsten concentrates has firmed in recent weeks, with 65% concentrate currently priced at US\$245.00/mtu (compared with normal expectations for at least US\$50/mtu discount to APT), suggesting a tightening of global concentrate supply.

Industry discussion suggests that stronger pricing levels for both commodities are likely to continue for some time, with some forecasters predicting APT tungsten prices in excess of US\$400/mtu. In addition, suggestions for molybdenum are for supply constraints for several years, and a number of potential molybdenum off-take partners have indicated a willingness to discuss fixed price purchasing agreements.

MOLYHIL TUNGSTEN PROJECT - NT (100% Thor)

During the quarter, Thor announced an updated Definitive Feasibility Study (DFS) for the wholly-owned Molyhil tungsten/molybdenum project, demonstrating low cost of production, a robust project NPV of A\$101million, and an IRR of 59%.

A full background on the project is available on the Thor Mining website www.thormining.com/projects.

On 8 January 2018, Thor announced an upgraded Statement of Open Pit Ore Reserve, increasing the open pit mine life by 1 year to 7 years, with increases in metal content of 10% for tungsten and 19% for molybdenum.

Adjacent to Molyhil, the Bonya tenements, which Thor acquired an interest in during the quarter, host outcropping tungsten deposits, along with a copper deposit and a vanadium deposit, which are under evaluation.

Table A. Molyhil DFS Key Features (announced 23 August 2018)

<http://www.thormining.com/-/thor/lib/docs/asx%20releases/20180823%20ASX%20Molyhil%20DFS.pdf>

Project NPV (@5%) post tax & royalties	A\$101 million	All Equity Case
Project IRR post tax & royalties	59%	All Equity Case
Project finance requirement	US\$43million	
Project Capex	A\$69 million	
Break even APT tungsten price	US\$230/mtu	
Life of Mine C1 Cash Cost	US\$90/mtu	
Life of Mine EBITDA	A\$239 million	
Payback from 1 st production	< 18 months	
Project Life	7 years	
Average feed grade	0.29% WO ₃	0.48% WO ₃ after ore sorting
	0.12% Mo	0.20% Mo after ore sorting
Operating throughput		
Crushing & Sorting	531,000 tpa	
Milling/Flotation etc	324,000 tpa	After ore sorting
Annual Production Average	125,000 mtu *	Approximately 1.2% of global market
		* 1mtu = 10Kg of contained WO ₃

Following the completion of the DFS, the Company has intensified efforts to lock in agreements for both off-take for the molybdenum & tungsten concentrates, and also project finance. It is expected that an announcement of a Corporate Advisor for this purpose will be made shortly.

Table B:

Molyhil Open Cut Ore Reserve Statement (announced 8 January 2018)

Classification	Reserve		WO ₃		Mo	
	'000 Tonnes		Grade %	Tonnes	Grade %	Tonnes
Probable	3,500		0.29	10,200	0.12	4,300
Total	3,500		0.29	10,200	0.12	4,300

- Thor Mining PLC holds 100% equity interest in this reserve.
- The Company is not aware of any changes which could affect this reserve statement.

The Ore Reserve study also identified approximately 1 additional year of material considered economic for recovery via mechanised underground mining methods. The resource continues below current reserve depth however portion of this is in the inferred category and additional drilling is required to allow it to be converted to reserve status.

Mineralisation has been shown to extend a further 200 metres below the base of the current resource. The current resource was constrained to 210 metres below ground surface.

Table C: Molhil resource by benchtop horizon showing Indicated & Inferred resource to 200metres below surface with potential for underground access

	Bench Top mRL	Tonnes '000	Mo %	Mo (t)	WO ₃ %	WO ₃ (t)
	420	48	0.08	39	0.73	350
	400	359	0.14	487	0.57	2,044
	380	440	0.13	569	0.48	2,096
	360	576	0.12	702	0.29	1,690
	340	605	0.11	678	0.22	1,341
	320	524	0.11	593	0.21	1,109
	300	506	0.12	612	0.19	967
	280	482	0.15	731	0.19	940
	260	440	0.15	657	0.23	1,031
30% outside pit	240	390	0.16	620	0.25	980
90% outside pit	220	336	0.17	556	0.18	607
	Total	4,705	0.13	6,244	0.28	13,154

Bonya

During the quarter, Thor completed the acquisition of an interest in a licence area close to Molyhil containing 13 known outcropping tungsten deposits, one copper deposit, and also hosts a vanadium deposit. An initial drilling program is an important next step in assessing the tungsten deposits which directors believe, should add to both the life and the scale of Molyhil. Regulatory and traditional owner heritage clearance work to this end is in process.

Separately, the Company has commissioned and independent geologist to conduct an assessment of both the copper and the vanadium deposits, and we await the results of that assessment. The vanadium deposit is of particular interest, with vanadium prices currently quoted at US\$116/kg in Ferro-vanadium..

PILOT MOUNTAIN TUNGSTEN PROJECT - NEVADA USA (100% Thor)

Thor's Pilot Mountain Project, acquired in 2014, is located approximately 200 kilometres south of the city of Reno and 20 kilometres east of the town of Mina, located on US Highway 95.

The Pilot Mountain Project is comprised of four tungsten deposits: Desert Scheelite, Gunmetal, Garnet and Good Hope. All of these deposits are in close proximity (~three kilometres) to each other and have been subjected to small-scale mining activities at various times during the 20th century.

During the quarter, the Company completed a Scoping Study which identified the potential for an initial operation with a 12 year life.

A full background on the project is available on the Thor Mining website www.thormining.com/projects.

The directors believe Pilot Mountain's resource is substantial on a global scale, and has potential for significant growth, in particular from the discovery in the August 2017 drilling program of an additional parallel zone of scheelite mineralisation at the Desert Scheelite deposit (Figure 6.).

The directors believe that the Desert Scheelite resource, which outcrops at surface at the western end for more than 400 metres, has potential to develop into a long term open pit mining operation which, when supplemented by higher grade mineralisation from the other deposits at Pilot Mountain, has the potential for a longer term profitable operation.

This significant tungsten resource is strategically located in the USA and tungsten has been confirmed by the US Department of the Interior as a critical mineral in 2018.

Pilot Mountain Scoping Study (announced 6 September 2018)

www.thormining.com/-/thor/lib/docs/asx%20releases/20180907%20Pilot%20Mountain%20Scoping%20Study.pdf

Table D: Desert Scheelite production supplemented with 120,000 tpa from Garnet and improved recovery and cost factors.

		Net Pre-Tax Income (US\$ million)	Opex - US\$/mtu produced	Payback Period
Base Case		US\$125	242	36 months
Add Contribution from Garnet	120,000tpa ore	US\$202	215	18 months
Scheelite Recovery - 85% improvement plus Garnet	85% recovery	US\$297	182	15 months
Mining costs 15% lower with higher volumes	15%	US\$317	171	12 months

Table E: Pilot Mountain Resource Summary (Announced 22 May 2017)

Resource			WO ₃		Ag		Cu	
Classification	MT	Grade %	Grade %	Contained metal (t)	Grade g/t	Contained metal (t)	Grade %	Contained metal (t)
Garnet	Indicated		-	-				
	Inferred	1.83	0.36	6,590				
	Sub Total	1.83	0.36	6,590				
Desert Scheelite	Indicated	8.41	0.27	22,700	21.3	179	0.14	11,800
	Inferred	1.49	0.23	3,430	9.07	13	0.17	2,500
	Sub Total	9.90	0.26	26,130	19.39	192	0.14	14,300
Summary	Indicated	8.41	0.27	22,690				
	Inferred	3.32	0.30	10,020				
Pilot Mountain Total	11.73	0.28	32,720					

Note:

- 100% owned by Thor Mining Plc
- The Company is not aware of any changes which could affect this resource estimate

Metallurgical testwork, conducted in 2013, demonstrated the successful production of saleable concentrates from Pilot Mountain mineralisation. Further testwork is required to

advance this to pre-feasibility study standard, and this next stage of metallurgical testwork commenced during the quarter.

Environmental study parameters are being established with relevant agencies, and Infrastructure studies have also commenced.

KAPUNDA COPPER PROJECT - SA (Thor earning 45%)

On 1st August 2017 Thor announced an investment in a newly incorporated private Australian company, Environmental Copper Recovery SA Pty Ltd. ("ECR"), initially via convertible loan notes of up to A\$1.8 million, which will be used to fund field test work and feasibility activities at Kapunda over the next 3 years. In turn ECR has entered into an agreement to earn, in two stages, up to 75% of the rights over metals which may be recovered via in-situ recovery ("ISR") contained in the Kapunda deposit from Australian listed company, Terramin Australia Limited ("Terramin" ASX: "TZN").

Earlier in the year (12 February 2018) Thor announced an Inferred Resource Estimate containing 119,000 tonnes of contained copper considered amenable to Insitu Recovery techniques. The grade of the resource, at 0.25%Cu, is considered typical for copper Insitu Recovery operations.

Table F: Kapunda Copper Resource Estimate (Announced 12 February 2018)

	Resource		Copper	
	Classification	MT	Grade %	Contained Cu (t)
Copper Oxide	Inferred	30.3	0.24	73,000
Secondary copper sulphide	Inferred	17.1	0.27	46,000
	Sub Total	47.4	0.25	119,000

Notes:

- ECR are earning a 75% interest in this resource, & Thor have investment rights for up to 60% of ECR.
- The Company is not aware of any changes which could affect this resource estimate.

Other near-term activities at Kapunda include continued community liaison in respect of project activities, testwork on historical drill core to determine the optimum extraction agent (lixiviant) most suited to the Kapunda deposit and establishing appropriate parameters for future field trials.

A first stage extraction test on historical core using glycine, a food additive, has been undertaken and outcomes showing copper, and potentially other potentially valuable metals recovered, and recovery rates, are expected shortly. Testwork trialling other potential lixivants is also proceeding.

During the quarter, on 30 July 2018, the Australian Government Ministry for Science, Jobs and Innovation announced an offer to ECR for research funding of A\$2,851,303, over a 30 month period, for the Kapunda In-Situ Copper and Gold Recovery Trial. This funding is expected to significantly advance the Kapunda project feasibility work, while minimising the ongoing funding requirement for Thor, other than for the A\$1.8 million required to earn the equity in ECR.

SPRING HILL GOLD PROJECT - NT (ROYALTY ENTITLEMENT)

In February 2017 Thor completed the A\$3.5 million sale of its Spring Hill Gold project¹. The sale transaction carries an ongoing residual royalty 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.

No royalties were received during the quarter.

¹Refer ASX and AIM announcement of 29 February 2016

INVESTMENTS

Thor holds just over 7.4 million ordinary shares in Hawkstone Mining Limited, an ASX listed company (ASX: HWK) with a 100% Interest in a Lithium project in Arizona, USA.

At the date of writing, Hawkstone shares traded at A\$0.024.

Competent Person's Report

The information in this report that relates to exploration results, and exploration targets, is based on information compiled by Richard Bradey, 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.

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Updates on the Company's activities are regularly posted on Thor's website www.thormining.com, 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) 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 2018¹ 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 Estimate² 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 resource³ on the portion of the historic Kapunda copper mine in South Australia recoverable by way of in situ recovery.

Thor has an interest in Hawkstone Mining Limited, an ASX listed company (ASX: HWK) with a 100% Interest in a Lithium project in Arizona, USA.

Finally, Thor also holds a production royalty entitlement from the Spring Hill Gold project⁴ 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

- ¹ Refer ASX and AIM announcement of 23 August 2018

- ² Refer AIM announcement of 22 May 2017 and ASX announcement of 23 May 2017

- ³ Refer AIM announcement of 10 February 2016 and ASX announcement of 12 February 2018

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⁴ Refer AIM announcement of 26 February 2016 and ASX announcement of 29 February 2017

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