ASX Code: "THR"

THOR MINING PLC

30 May 2012

Company Announcements Office, ASX Securities Limited, 20, Bridge Street, Sydney, N.S.W. 2000

# UPDATED TUNGSTEN-MOLY RESERVE ESTIMATE GIVES INITIAL FOUR YEAR MINE LIFE FOR THOR'S NT MOLYHIL PROJECT

An updated reserve ore estimate of 1.64 million tonnes @ 0.42% WO $_3$  (tungsten) and 0.13% Mo (molybdenum) has been announced by the Board of Thor Mining Plc ("Thor" or the "Company") (AIM, ASX: THR) for the Company's wholly owned Molyhil project in Australia's Northern Territory ("Molyhil").

# Highlights

- Reserve statement of 1.64 million tonnes @ 0.42% WO<sub>3</sub> and 0.13% Mo.
- Tungsten grade in the reserve is 50% above resource estimate grade.
- The high grade tungsten provides opportunity for early payback of project capital.
- The Reserve provides a 4 year initial mine life at Molyhil with substantial upside potential to extend project life (only 35% of resource tonnage is included in this initial reserve).
- The Molyhil resource remains open at depth, with newly identified prospective extensions, and nearby targets adding additional potential for extension of mine life.

#### Next steps

- Completion of detailed mine plan
- Completion of financial feasibility study

Thor Mining Executive Chairman, Mr Mick Billing:

"A development decision for Molyhil is progressively becoming closer. This updated reserve is very robust, and we have significant upside beyond this new ore reserve, both in the resource and from exciting exploration potential. This statement of ore reserves underpins a profitable mining plan for an initial period of approximately 4 years."

#### THOR MINING PLC

Registered Numbers: United Kingdom 05 276 414 Australia 121 117 673

Registered Office: Level 1 32 Richmond Road KESWICK, SA, 5035 Australia

Ph: +61 8 7324 1935 Fx: +61 8 8351 5169

Email:

corporate@thormining.com

Website: www.thormining.com

Enquiries:

Mick Billing Executive Chairman Thor Mining PLC +61 8 7324 1935

Nominated Advisor Gerry Beaney Grant Thornton +44 (0) 20 7383 5100

ASX Listings: Shares: THR

AIM Listings: Shares: THR

Directors:
Michael Billing
Michael Ashton
Gregory Durack
Trevor Ireland
David Thomas

## **Key Projects:**

- Molyhil (NT) *Tungsten, Molybdenum*
- Dundas (WA)
   Gold
- Spring Hill (NT)

ASX Code: "THR"

THOR

30 May 2012

## Molyhil Open Cut Ore Reserve Statement

Following the publication in January 2012 of an updated Mineral Resource estimate of 4.7 million tonnes averaging 0.28%  $WO_3$  & 0.22%  $MoS_2$  in Indicated and Inferred categories, mining consultancy Runge Limited, has issued a statement of Open Cut Ore Reserve for the Molyhil deposit of 1.64 million tonnes averaging 0.42%  $WO_3$  & 0.13% Mo (0.22%  $MoS_2$ ) categorised as Probable. The Indicated Mineral Resources are inclusive of those Mineral Resources modified to produce the Ore Reserves. See Table 1 and Attachment 1.

Table 1: Molyhil Open Cut Ore Reserve Statement

	Ore Reserves					
	Tonnage (Mt)	Mo (%)	WO <sub>3</sub> (%)	Mo (t)	WO <sub>3</sub> (t)	
Proved	0	0	0	0	0	
Probable	1.64	0.13	0.42	2,200	6,900	
TOTAL	1.64	0.13	0.42	2,200	6,900	

Notes: Estimate has been rounded to reflect accuracy

All estimates are on a dry tonne basis

The reserve estimate extends to a maximum depth below surface of 122 metres

The statement is derived from the Indicated portion of the resource estimate only, and the Inferred portion is excluded from calculations.

## Next steps

Using this open cut reserve statement, and incorporating minor elements of the inferred resource, Runge is preparing a detailed mining plan to provide Thor with a monthly mining schedule for the currently estimated life of the proposed operation, including tonnes of ore and waste removed and the grade of the material mined. This will then be incorporated into the financial model for the project to estimate economic returns.

It is expected that this process will be completed during June 2012.

#### The longer term future for Molyhil

It is expected that the mining plan will largely reflect the open cut ore reserve statement, and therefore the life of the proposed operation in the Definitive Feasibility Study (DFS) will be of the order of 4 years. *Pit optimisation studies by Runge, however, reveal that a relatively modest 7% improvement in economic factors have the potential to increase the reserve and mining life by over 50%*. By contrast, a 20% deterioration in economic factors shows a much more modest 13% reduction in mining life and reserve.

The potential beyond that estimated life may include:

- Extending the open cut operation and/or underground mining to extract some of the 65% of the resource, laterally and at depth, which is not included in the ore reserve.
- Potential production exploration targets including some recently identified within several kilometres of Molyhil (Figure. 1)
- Potential from an also, recently identified, large magnetic target below the known Molyhil resource (Figure. 2) which, if it contains substantial economic mineralisation, could sustain a longer term underground mining operation.

THOR MINING PLC

30 May 2012

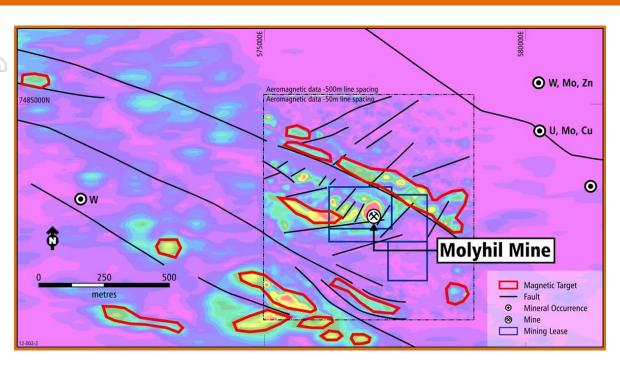


Figure 1: Tungsten prospects (magnetic anomalies) adjacent Molyhil

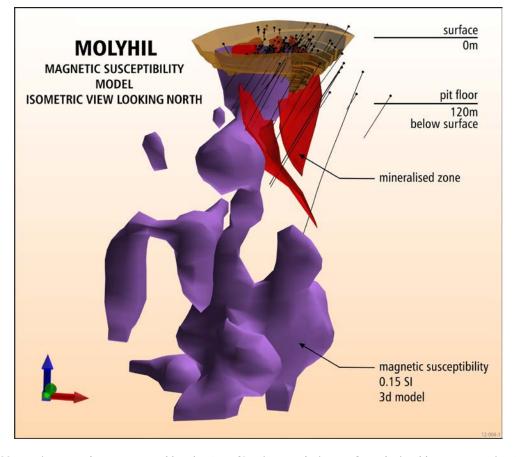


Figure 2: Magnetic anomaly represented by the 0.15 SI unit, purple iso-surface derived by unconstrained magnetic modelling of the high resolution aeromagnetic data flown over the Molyhil Mine in May 2004. This work was commissioned by Tennant Creek Gold (NT) Pty Ltd and executed by Fugro Airborne Surveys using a line spacing of 50 metres and a nominal terrain clearance of 50 metres.

30 May 2012

## **About Molyhil**

Thor acquired the Molyhil project in 2005, and has advanced the project from being an advanced exploration project to one which is ready for development. A definitive feasibility study (DFS) was completed in 2007 with outcomes indicating profitable development. In addition Thor Mining PLC secured development approval from traditional owners and environmental approval from the Department of Regional Development, Primary Industry, Fisheries and Resources in the Northern Territory

The 2008 global financial crisis depressed the prices of both molybdenum and tungsten considerably, resulting in the suspension of plans for mine development.

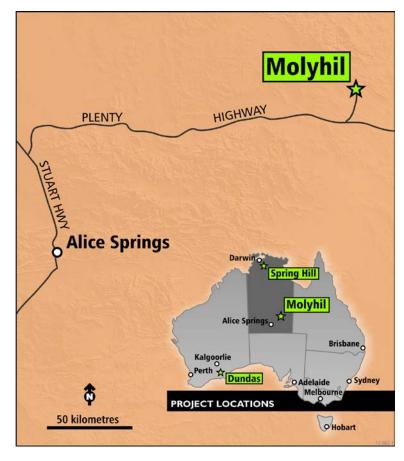


Figure 3: Molyhil project location

For further information, please contact: THOR MINING PLC

Mick Billing Executive Chairman +61 8 7324 1935 **ASX Code: "THR"** 



30 May 2012

#### Competent Person statement -

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 2004 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.

The information in this report that relates to the Molyhil Mineral Resource is based on information compiled by Mr Craig Allison, who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Allison is a full-time employee of Runge Limited. 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 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Allison consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to the Molyhil Ore Reserve is based on information compiled and reviewed jointly by Mr Alan Dickson and Dr Andrew Newell. Alan Dickson is a Fellow and Chartered Professional of the Australasian Institute of Mining and Metallurgy, a member of the Mineral Industries Consultants Association and is an associate of Runge. Alan Dickson, has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify him as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Andrew Newell is a Chartered Professional Member of the Australasian Institute of Mining and Metallurgy, a member of the Mineral Industries Consultants Association and is an employee of Runge. Andrew Newell, has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify him as a Competent Person as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

THOR

30 May 2012

Attachment 1: Runge Limited (RUL), May 2012. Statement of Ore Reserves (Open Cut) Molyhil Tungsten-Molybdenum Project, Northern Territory.

# **Executive Summary**

Runge Limited (Runge) was commissioned by Thor Mining Plc ("Thor") to complete an independent estimate (the "Statement") of the Open Cut Ore Reserves for the Molyhil Tungsten-Molybdenum Deposit ("Molyhil" or the "Deposit"). The Statement reports the Reserves as at 28<sup>th</sup> of May, 2012 and has been undertaken in compliance with the requirements of the reporting guidelines of the 2004 Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia ("The JORC Code").

## Geology

Tungsten and molybdenum mineralisation was originally discovered at Molyhil in 1973. The Molyhil deposit was initially drilled in 1977 with further drilling carried out in 1981. Between 1975 and 1976 approximately 20,000 tonnes of molybdenum and tungsten mineralisation were mined from the northern Yacht Club skarn body. The adjacent Southern skarn body was mined during 1978 to 1982 to a depth of approximately 25m. Thor assumed control of the property in 2005 and has continued exploration and mining studies.

The Molyhil deposit is the most developed prospect within the project area. Three shafts, in 2005, have been sunk within the Southern Skarn body and crosscuts driven from their bases across the width of the mineralised zone. Bulk sampling information and additional diamond core holes at depth complement a significant RC database.

Drilling extends to a depth of approximately 450m below surface and the mineralisation was modelled to a depth of approximately 410m below the surface. The estimate is based on geophysical surveys, near-surface underground workings with bulk samples, historical mining and surface RC and diamond drilling carried out by Thor and previous explorers.

The Mineral Resource is summarised in Table 2 below.

Table 2 January 2012 Molyhil Mineral Resource Estimate (Reported at 0.1% combined Mo + WO3 Cut-off and above 200mRL only)

Classification	Tonnes	Fe	MoS <sub>2</sub>	$WO_3$	MoS <sub>2</sub>	$WO_3$
	t	%	%	%	(t)	(t)
Measured	-	-	-	-	=	-
Indicated	3,820,000	18.8	0.22	0.29	8,200	10,900
Inferred	890,000	15.2	0.25	0.25	2,200	2,200
Total	4,710,000	18.1	0.22	0.28	10,400	13,100

Note minor rounding errors may occur in compiled totals.

The deposit was estimated by using Ordinary Kriging (OK) grade interpolation, constrained by interpretations prepared using a nominal 10 to 15% iron oxide cut-off grade to define the skarn bodies and a minimum downhole length of 2m.

## **Metallurgical Factors**

The metallurgical factors were provided by Thor from the "Molyhil Testwork T897 Metallurgical Report", Nagrom (April 2012). The recoveries and concentrate grade recommended by RUL and based on the Nagrom testing and discussions are summarised in Table 3

30 May 2012

Table 3 Metallurgical Factors

Composite Average	%
WO <sub>3</sub> Processing Recovery	85%
Mo Processing Recovery	80%
WO <sub>3</sub> Concentrate Grade	65%
Mo Concentrate Grade	52%

# **Mining Methodology**

To define the economic pit limits the geological model was reblocked to 5x5x5 and imported into Whittle 4X pit optimisation software ("Whittle 4X"). Other key inputs to Whittle 4X were estimates of the mining costs, process plant metal recovery, geotechnical design criteria and selling price. The costs other than mining costs were provided by "Proteus Engineering Group Pty Ltd Cost Estimate Reports", 11<sup>th</sup> April 2012 and geotechnical criteria were derived from the "Warren Hitchcock Geotechnical Engineering Pty. Ltd.", 2<sup>nd</sup> of March 2012 report. The other key inputs were provided by Thor.

The pit optimisation defined a series of nested pit shells based on revenue factors of 80% (that is, 80% of the base selling price) to 120% in 1% increments. The results indicated that the mining inventory was relatively sensitive to price. A net present value cash flow analysis of the results identified Shell 20, at a revenue factor of 100%, as potentially delivering the highest value and was selected for detailed pit design and subsequent mine planning.

The in situ ore quantities within the ultimate pit design were adjusted for mining loss and dilution.

## **Ore Reserves**

A total of **1.64 Mt** of Open Cut Ore Reserves is estimated at the Molyhil deposit which is categorised as Probable (see Table 4).

Table 4 Total Open Cut Ore Reserves

	Ore Reserves					
	Tonnage (Mt)	Mo (%)	WO <sub>3</sub> (%)	Mo (t)	WO <sub>3</sub> (t)	
Proved	0	0	0	0	0	
Probable	1.64	0.13	0.42	2,200	6,900	
TOTAL	1.64	0.13	0.42	2,200	6,900	

Notes: Estimate has been rounded to reflect accuracy.

All the estimates are on dry tonne basis.

Ore Reserves are not additional to Mineral Resources.