

29 July 2014

THOR MINING PLC

UPGRADED ORE RESERVE DELIVERS LONGER 6 YEAR LIFE FOR MOLYHIL TUNGSTEN MINE

An updated Ore Reserve Statement of 3.0 million tonnes @ 0.31% WO₃ (tungsten tri-oxide) and 0.12% Mo (molybdenum) has been announced by Thor Mining Plc ("Thor") (AIM, ASX: THR) for its wholly-owned proposed Molyhil tungsten mine in Australia's Northern Territory ("Molyhil").

The revised reserve is likely to support a six year mine life at Molyhil, a two year extension from the previous study as announced on 30 May 2012.

This new reserve, with improvements largely attributable to the benefits of adopting ore sorting technology, has **boosted mineable reserves of contained tungsten in WO₃ by 33.3% to 9,200 tonnes, and contained molybdenum by 63.6% to 3,600 tonnes.**

Highlights

- Reserve statement of **3.0 million tonnes @ 0.31% WO₃ and 0.12% Mo.**
- Ore sorting increases grade of material processed by 15% to 0.35% WO₃ and 0.14% Mo.
- Post ore sort tungsten equivalent grade of 0.46% WO₃ using a 15% upgrade.
- **Very high grade near-surface tungsten provides opportunity for early payback of project capital.**

Next steps

- Update capital and operating cost estimates
- Completion of upgraded financial feasibility study

Mr Mick Billing, Executive Chairman of Thor Mining:

"This is a major step forward for the Molyhil project. The Open Cut Ore Reserve Statement provides for significant additional production from Molyhil, whilst the process improvements demonstrate that production costs will be very low, particularly in the initial couple of years. Indeed, the tungsten grade of the mineralisation, in the top 40 metres of the resource, before molybdenum credits, is 0.53% WO₃, substantially above the project's average grade, suggesting very low operating costs in the first two years of operation, and subsequent early capital payback.

The next step is to update the bankable feasibility study for the project, including a review of capital and operating costs. This is anticipated to be completed before the end of the quarter ended September 2014, enabling the finance of the project to be concluded. The Directors believe that the enhanced project economics shown by this updated Reserve statement will significantly boost the prospects of securing project finance."

Molyhil Open Cut Ore Reserve Statement

Based upon the Resources Estimate reported to the ASX & AIM on 30 January 2014, and following a re-estimate of costs and metallurgical recovery factors, mining consultancy, AVCS Pty Ltd, has issued a statement of Open Cut Ore Reserve for the Molyhil deposit of 3.0 million tonnes averaging 0.31% WO₃ & 0.12% Mo, classified as Probable. See Table 1 and Attachment 1. The improved outcome is largely driven by successful test results of pre-concentration of ore using ore sorting technology.

Table 1: Molyhil Open Cut Ore Reserve Statement

Classification	Reserve '000 Tonnes	WO ₃		Mo	
		Grade %	Tonnes	Grade %	Tonnes
Probable	3,000	0.31	9,200	0.12	3,600
Total	3,000	0.31	9,200	0.12	3,600

Notes:

- Thor Mining PLC holds 100% equity interest in this reserve.
- 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 150 metres.
- The statement is derived from the Indicated portion of the resource estimate only, and the Inferred portion is excluded from the calculations. The long-term prices used were US\$408/mtu for WO₃ concentrate and US\$12.76/lb for Mo concentrate at an exchange rate of US\$0.83 to A\$1.00. The WO₃ and Mo Processing Recovery post ore sorting used was 85% and 77.8% respectively.

Much of the improvement in outcomes is derived from the innovation of ore sorting technology where Thor has successfully demonstrated a 15% to 25% mass rejection with minimal loss of payable metal. Other savings have been achieved compared with previous studies, via electing to owner-operate mining activities rather than use contract miners, and to purchase some infrastructure items in lieu of leasing. Some further process improvements are also in progress with scheelite flotation testwork continuing.

Next steps

Using this open cut reserve statement, AVCS has prepared 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, along with revised capital and operating cost estimates, to prepare economic return estimates.

It is expected that this process will be completed during the quarter ending 30 September 2014.

About Tungsten

Tungsten is used in the manufacture of hard metals, steels, alloys and mill products. Its unique physical properties (melting point/hardness/tensile strength) and lack of substitutes, make tungsten critical in industrial, oil & gas, mining and agricultural applications. It is classified as a strategic metal in the US, EU and China. Production and consumption of tungsten is dominated by China, with western world demand growing. Tungsten prices increased strongly during 2011 & have largely held those gains.

Demand is estimated by the International Tungsten Industry Association to grow at 4%pa til 2018.

While Molyhil is principally a tungsten project, the contribution from the contained molybdenum is significant. The grade of material reporting to the processing plant adjusted for molybdenum credits, and after ore sorting, will be equivalent to 0.46% WO₃, well above the grade of most Western World operating or proposed tungsten mining operations.

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Competent Persons Report

The information in this report that relates to the Ore Reserves is prepared by Andrew Vidale who is a Member of The Australasian Institute of Mining and Metallurgy. Andrew Vidale is a full time employee of AVCS and has sufficient experience 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" ("The JORC Code 2012 Edition"). Andrew Vidale consents to the inclusion of material within this report by Thor.

Molyhil - Table 1

Criteria	Commentary
<i>Mineral Resource estimate for conversion to Ore Reserves</i>	The Ore Reserve estimate is based on the Mineral Resource estimate prepared by Runge Pincock Minarco (RPM) reported in the October to December 2013 quarterly report. The Mineral Resources are reported inclusive of Ore Reserves.
<i>Site visits</i>	A site visit has not been conducted by the Competent Person. The Competent Person is satisfied that the 3D topographic data supplied and descriptions of the site environment and expected operating conditions are adequate for the completion of appropriate mine designs and schedules and for the estimation of Ore Reserves.
<i>Study status</i>	Thor completed and published a Definitive Feasibility Study (DFS) in June 2012. A JORC 2004 compliant Ore Reserve was published in May 2012. This Ore Reserve is an update based on planned changes to ore processing and revised operating and capital cost estimates leading to updated pit optimisation, pit design and mine schedules.
<i>Cut-off parameters</i>	An NSR cut-off has been determined taking into consideration: <ul style="list-style-type: none"> ○ WO₃ price ○ Mo price ○ Processing cost ○ Metallurgical recoveries ○ Transport cost ○ G&A costs <p>Royalty to Northern Territory government and private entities were not included in the calculation of the NSR</p>
<i>Mining factors or assumptions</i>	<p>The Ore Reserve has been estimated from detailed pit designs which were based on a preferred shell chosen from a range of pit optimisation shells. The pit optimisation incorporated sensitivity analyses on mining cost, processing cost, revenue, slope angle and geo-metallurgical recovery.</p> <p>The Ore Reserve estimate assumes conventional truck and shovel open pit mining practices, X-Ray ore sorting and conventional flotation and gravity processing practices.</p> <p>Pit design slope parameters were sourced from a report by Pells Sullivan Meynik; "Molyhil, Geotechnical Open Pit Slope Design Aug 2012. Overall slope angles for pit optimisation were adjusted for the likely impact of ramps – these overall angles aligned well with final pit designs.</p> <p>The resource block model provided by Thor has block dimensions of 1.25m in the east-west direction x 2.5m in the north-south direction x 2.5m in elevation.</p> <p>A mining block model was prepared from the resource block model, the mining model incorporates estimates for mining loss and dilution, geo-metallurgical stage recoveries, costs and revenue.</p> <p>The mining model was regularised to a 5m bench height and a block edge dilution of 0.5m was applied. Value based ore selectivity analysis assuming a 5m x 5m SMU was carried out to determine ore boundaries.</p> <p>The net impact of regularisation, mining dilution and SMU is 103% mass recovery of ¹mineralised material, 98% mass recovery of WO₃ and Mo, head grade of 96% of in- situ.</p> <p>¹ Based on 0.1% combined Wo₃+Mo cutoff within the final pit design.</p>

	<p>The proposed pit is developed in two stages. Minimum dimension of the first stage pit floor is 170m x 65m. The second stage mining width is typically 60m to 100m with a minimum width of 30m. The final pit is approximately 150m deep with the final 45m utilising a single lane ramp. Final pit floor design includes a “goodbye” cut which narrows to between 25m and 35m in width.</p>
<i>Metallurgical factors or assumptions</i>	<p>Ore processing will consist of crushing, X-Ray sorting for pre-concentration, grinding, flotation and gravity separation. These technologies are industry standards for the type of deposit.</p> <p>Drilling, bulk sampling and metallurgical test work by Thor has been ongoing since 2005.</p> <p>Metallurgical recoveries were estimated in the block model based on the test work and trial data provided by Thor. These indicate:</p> <ul style="list-style-type: none"> ○ 15% of ROM mass rejected by ore sorting with a loss of 0.4% WO₃ mass and 1.1% Mo mass ○ 85.0% recovery of WO₃ in mill feed (84.6% of ROM feed) ○ 77.8% recovery of Mo in mill feed (77.0% of ROM feed) <p>Copper is a potential penalty element in the Molybdenum concentrate. Test work indicates the copper grade will not exceed the allowable limit in previous off-take agreements hence no price penalty has been applied.</p> <p>Molybdenum is a potential penalty element in the Scheelite concentrate. Test work indicates the molybdenum grade is likely to be above the penalty threshold. Price penalties are applied in; the calculation of NSR, the pit optimisation and the financial model based on estimates from off-take partners.</p>
<i>Environmental</i>	<p>Approval for the Mining Management Plan was granted by the Northern Territory Director of Mining and Petroleum Authorisations and Evaluations in 2008 but was let lapse by Thor.</p> <p>The Mining Management Plan was re-submitted in June 2012, Thor are currently awaiting a response.</p> <p>Geological data indicates the waste rock is not likely to be acid consuming, consequently no further studies have been undertaken on waste rock characterisation or selective placement.</p>
<i>Infrastructure</i>	<p>Infrastructure for all activities will need to be installed/constructed before the commencement of mining.</p> <p>Site access from the Plenty Highway will require upgrading of an existing road for both transport of construction materials and concentrate shipment. Agreements are in place with the landholder for use of this road.</p> <p>A community assessment of stakeholders was conducted in 2007. Stakeholders consulted in identifying opportunities and risks were:</p> <ul style="list-style-type: none"> ○ Central Land Council (CLC) ○ Indigenous Coordination Venture ○ Indigenous Business and Industry Services ○ Alice Springs Town Council ○ Mining, Petroleum and Defence Support Group ○ Desert Knowledge Australia ○ Centre for Appropriate Technology ○ Arltarlpilta Community Government Council ○ Jinka/Jervois station <p>An agreement is in place with the CLC to provide indigenous employment opportunities</p>
<i>Costs</i>	<p>Full project valuation has been conducted by Thor. The Competent Person understands that Capital costs have been sourced from suppliers and contractors during the DFS process and since updated by Thor.</p> <p>Operating costs have been based on supplier quotes and extrapolation from</p>

	<p>Thor and Competent Person experience elsewhere.</p> <p>Project valuation costs include tailings retention. The DFS included designs for a tailings storage facility (TSF) near the eastern side of ML24429. The subsequent increase in Ore Reserve and pit size necessitates the placement of waste rock dumps in that area, and it is planned to relocate the TSF immediately to the north of the existing MLs. The proposed location lies within Thor's exploration lease EL22349.</p> <p>An exchange rate of 0.83 USD/AUD has been used in the pit optimisation and calculation of the NSR.</p> <p>Royalty to Northern Territory government and Central Land Council have been calculated in the financial model.</p>
<i>Revenue factors</i>	<p>NSR calculation and pit optimisation used:</p> <ul style="list-style-type: none"> ○ US\$408/mtu for WO₃ ○ US\$12.76/lb for Mo <p>The WO₃ price was determined by discounting the average market prediction of US\$458/mtu for ²APT for 2014~2018 sourced from an independent report by Tungsten Market Research Ltd (Jan 2014). The Mo price was determined by discounting the LME long term prices estimate of ³\$16.47/lb.</p>
<i>Market assessment</i>	<p>Neither tungsten nor molybdenum have potential substitutes for their main application and consumption for both is expected to continue to grow. Molybdenum is often a secondary product from Cu or Cu/Au mines and production can be readily turned on or off as demand and price dictates.</p> <p>Market predictions for tungsten beyond 2014 are for demand to exceed supply and price to increase.</p> <p>Market predictions for molybdenum beyond 2013 are for demand to increase with global GDP and prices increase beyond 2015</p>
<i>Economic</i>	<p>Economic inputs such as foreign exchange rates, royalties, costs, discount rate etc are set by Thor and have been tested in the project valuation model.</p> <p>Project assessment by Thor indicates a very attractive positive net present value and IRR.</p>
<i>Social</i>	<p>Consultation has occurred with the relevant stakeholders, including aboriginal peoples who claim affinity with the land upon which the plant will be located.</p> <p>Tripartite Deed of Agreement has been executed in 2008 between the NT government, Thor, the Central Land Council and the Arrapere Group.</p> <p>Thor obtained the Aboriginal Areas protection Authority Certificate in March 2012.</p>
<i>Classification</i>	<p>The entire Ore Reserve is classified as Probable.</p> <p>Only Indicated Mineral Resources were considered in the calculation of the NSR for the purposes of pit optimisation and Reserves estimation.</p> <p>The Ore Reserve estimate does include minor quantities of Inferred Resources and unclassified mineralisation that have resulted from the formation of an SMU and/or inclusion of edge dilution across the Indicated Resource block boundary.</p> <p>² Reduction for refining to Ammonium Para Tungstate (APT) which is the most traded form of tungsten.</p> <p>³ Allows for refining to Mo.</p>

	<p>This additional material is <3% of the estimated Reserve mass and contains approximately 1% of the WO3 and Mo.</p> <p>No portion of the Probable Ore Reserves have been derived from Measured Resources - there are no Mineral Resources of Measured classification.</p>
<i>Audits or reviews</i>	The Ore Reserves has not been externally audited.
<i>Discussion of relative accuracy/ confidence</i>	<p>The pit designs and mine schedule on which the Ore Reserve is based have been prepared to Feasibility Study level with a corresponding level of confidence.</p> <p>The mineralisation at Molyhil comprises two near vertically dipping iron rich skarn lobes in granite host rock. The defined ore boundaries are, within each lobe, continuous and in the order of 50m wide (east to west) by 100m long (north to south) for the western lobe and 40m wide (east to west) by 80 m long (north to south) for the eastern lobe overall.</p> <p>Minimum mining width across the ore zones rarely approaches the assumed SMU limit of 5m and is more typically greater than 20m.</p> <p>The external ore boundary is typically at the contact between the skarn and the host granites and thus easily visually identified. The internal waste boundaries and external boundaries that are within the skarn will require blast hole sampling and/or a field XRF for grade control.</p> <p>Mining modifying factors, pit designs and schedule reflect the scale of the intended equipment and planned operation.</p>